



REPUBLIC OF MOZAMBIQUE

**MINISTRY OF PUBLIC WORKS, HOUSING AND WATER RESOURCES,
NATIONAL ROADS ADMINISTRATION, PUBLIC INSTITUTE**

CLIMATE RESILIENT ROADS FOR THE NORTH (P500488)

**In the Provinces of Cabo Delgado, Nampula & Niassa –
Mozambique**

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

ESMF PREPARED FOR:



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06 MARCH 2024

DOCUMENT CLEARANCE FORM

Name of Unit	Environmental Services
Document Title	Consultancy Services to Develop the Environmental and Social Instruments for Climate Resilient Roads for the North of Mozambique.
Project Name	Climate Resilient Roads for the North (P500488)
RFP Nº	47A003041/CP/157/2023
Client Address	Administração Nacional de Estradas (ANE) Gabinete do Director Geral Attention: Mr. Elias Anlaué Paulo - Director General Av. de Moçambique, Nº 1225, C.P. 403 Maputo Mozambique Telephone: +258 21 476 163 / 7, Email: anenorte.42@ane.gov.mz

Quality Assurance	Reviewer/Approver	Title/Role	Version
Consultant (JBN & EA Consultoria)			
Author	JBN in Joint-Venture with EA Consultoria	Consultants	v.001
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Approver	Nelson Omagor	Team Leader	v.001
External Parties - Client Reviewers			
ANE		Final Approval	v.001
World Bank		Clearance	v.001
Current Version			
		Draft Report	<input checked="" type="checkbox"/>
		Final Version	<input type="checkbox"/>

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ABBREVIATIONS AND ACRONYMS

ANE	Administração Nacional de Estradas
ARPAC	Arquivo do Património Cultural
CAE	Child Abuse/Exploitation
DPDTA	Provincial Directorate of Territorial Development and Environment
EA	Environmental Assessment
EHSG	Environmental, Health and Safety Guidelines
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESSF	Environmental and Social Screening Form
ESMP	Environmental and Social Management Plan
GBV	Gender Based Violence
GoM	Government of Mozambique
GRM	Grievance Redress Mechanism
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion Report
IDA	International Development Association
IDPs	Internally Displaced Persons
IFC	International Finance Corporation
IFRDP	Integrated Feeder Roads Development Project
IGAs	Income Generating Activities
STI	Sexually Transmitted Diseases
MADER	Ministério da Agricultura e Desenvolvimento Rural
MIC	Ministério da Indústria e Comércio
MIREME	Ministério de Recursos Minerais e Energia
MTA	Ministério da Terra e Ambiente
MozDGM	Mozambique Dedicated Grant Mechanism
MOPHRH	Ministério das Obras Públicas Habitação e Recursos Hídricos
NGOs	Non-Governmental Organizations
NTFPs	Non-Timber Forest Products
OED	Operations Evaluation Department

OHS	Occupational Health and Safety
OPRC	Output- and Performance-based Roads Contracts
PLC	Project Liaison Committee
POs	Political Operations
PPP	Public and Private Partnership
PQG	Plano Quinquenal do Governo
QNP	Quirimbas National Park
RAP	Resettlement Action Plan
RF	Road Found
RoW	Right of Way
ToR	Terms of Reference
VAC	Violence Against Children
WB	World Bank

E1. Introdução e Descrição do ProjeCto

O Banco Mundial apoiará o Governo de Moçambique (GdM) através da Administração Nacional de Estradas, Instituto Público (ANE, IP) e Fundo de Estradas, Fundo Público (RF, PF) na implementação de Estradas Resilientes ao Clima para o Norte na Região Norte de Moçambique (P500488) (Projecto CRRN). O objectivo do projecto é melhorar a conectividade rodoviária resistente ao clima, segura e sustentável nas Províncias do Norte de Moçambique. O projecto apoiará as seguintes actividades: modernização, reabilitação e manutenção de estradas secundárias e terciárias seleccionadas (adoptando a abordagem de contratos rodoviários baseados nos resultados e no desempenho (OPRC)), bem como a construção e reabilitação de pontes e estruturas de drenagem no rede rodoviária secundária e instalação de pontes de páteo na rede rodoviária terciária. As infra-estruturas comunitárias (mercados, escolas, centros de saúde, instalações de armazenamento de produtos agrícolas) serão fornecidas à população rural ao longo de segmentos de estradas visados pelo projecto e incorporadas nos contratos de obras. O Projecto também apoiará a melhoria da segurança rodoviária e das actividades de mobilidade nos transportes; fortalecimento institucional e gestão de projetos; e atividades de resposta a emergências contingenciais. As actividades do projecto decorrerão nas Províncias do Norte de Moçambique, nomeadamente Cabo Delgado, Niassa e Nampula. Locais específicos, projetos e escopo detalhado das atividades do subprojeto não são conhecidos nesta fase, porque sua seleção final será determinada posteriormente, após a realização de Estudos de Projeto de Engenharia específicos juntamente com as AIAS específicas do local (aprovação pós-projeto).

E2. O Instrumento do Quadro de Gestão Ambiental e Social (QGAS)

Uma vez que nem todas as atividades, escopo e desenhos de implementação dos subprojetos do Projeto CRRN são conhecidos/feitos nesta fase, este Quadro de Gestão Ambiental e Social (QGAS) estabelece princípios gerais, regras, diretrizes e procedimentos para avaliar e gerenciar os aspectos ambientais e sociais riscos e impactos associados aos subprojetos a serem financiados e fornece mitigações gerais e instrumentos ambientais e sociais para orientar o desenvolvimento dos instrumentos ambientais e sociais de cada subprojeto durante a fase de implementação. O QGAS foi preparado de forma consultiva e participativa. Foram realizadas consultas com as partes interessadas relevantes como parte da preparação do ESMF e de outros documentos-quadro, nomeadamente, o Plano de Envolvimento das Partes Interessadas (SEP), Procedimentos de Gestão Laboral (LMP), Violência Baseada no Género (VBG)/Exploração e Abuso Sexual (SEA) e Plano de Acção para o Assédio Sexual (SH) (Plano de Acção VBG/SEA/SH) e Procedimento para Descobertas Ocasiais (CFP). Os Consultores A&S e a ANE organizaram reuniões consultivas institucionais individuais e amplos workshops de consulta pública de 15 de Janeiro a 23 de Fevereiro de 2024, nas províncias de Maputo, Pemba (Cabo Delgado), Lichinga (Niassa) e Nampula. O feedback das reuniões de consulta e dos workshops foi incorporado nos vários documentos-quadro, respectivamente.

E3. Política Ambiental e Social Nacional e Requisitos Legais

Este QGAS foi preparado em conformidade com as políticas e leis aplicáveis de Moçambique e do FSE do Banco Mundial. Uma apresentação detalhada das Políticas e Leis Ambientais e Sociais Nacionais aplicáveis está contida no Capítulo 3.

E4. Estrutura Ambiental e Social (ESF) do Banco Mundial, Classificação de Risco Ambiental e Social (ESRC) e Instrumentos Ambientais e Sociais

As 10 Normas Ambientais e Sociais (NAS) do FSE, juntamente com os seus Anexos, estabelecem os requisitos para os Mutuários relativos à identificação, avaliação e gestão de riscos e impactos ambientais e sociais associados a projectos apoiados pelo Banco através de Financiamento de Projectos de Investimento. . A Classificação de Risco Ambiental e Social do projecto é classificada como Substancial considerando que (i) as intervenções físicas previstas no âmbito do projecto correspondem principalmente à reabilitação ou modernização de troços de estradas secundárias e terciárias e pontes existentes, que ocorrerão dentro dos direitos de passagem existentes, e não se espera que causem riscos e impactos adversos significativos em áreas de alto valor ou sensibilidade, prevê-se que as atividades do projeto sejam de escopo moderado e seus riscos ambientais e sociais podem ser mitigados com medidas prontamente disponíveis e confiáveis.

E5. Procedimentos de Avaliação e Gestão Ambiental e Social

Os procedimentos para Avaliação Ambiental e Social (ESA) de Subprojetos incluirão a triagem de subprojetos CRRN; determinação da classificação dos riscos socioambientais e definição do(s) nível(is) de avaliação(ões) exigido(s). Depois que um subprojeto tiver passado pelo processo de triagem, quando necessário, a preparação de instrumentos ambientais e sociais será feita e envolverá a preparação de Avaliação de Impacto Ambiental e Social (AIAS) e PGAS de acordo com as leis nacionais e o FSE do Banco Mundial. A estratégia de implementação deste QGAS requer a integração total das questões de gestão ambiental e social, uma vez que serão identificadas nos respectivos subprojectos AIAS e PGAS orientados por este QGAS e incluídos nos documentos de concurso e nos contratos do Empreiteiro para garantir a implementação dos subprojectos conforme indicado no ESMP. O PGAS exige que os Empreiteiros preparem e preparem o PGAS do Empreiteiro específico do local (CESMP) e o submetam aos Consultores de Supervisão e à ANE, IP para revisão e aprovação antes do início das obras civis. Este QGAS garantirá que as consultas públicas com as partes interessadas relevantes (incluindo grupos vulneráveis, como PDIs) de projectos e subprojectos sejam conduzidas e bem documentadas para informar a AIAS e a concepção dos projectos/subprojectos sobre as medidas a empreender. Este ESMF descreve mecanismos de reparação de queixas (GRMs) a serem implementados para receber, avaliar e resolver todas as queixas relacionadas com o Projecto CRRN e subprojectos.

E6. Os potenciais riscos ambientais e sociais e medidas de mitigação

Foi realizado um mapeamento de impacto genérico para avaliar os possíveis impactos e riscos ambientais e sociais do Projecto CRRN. A seguir estão os impactos e riscos ambientais e sociais genéricos mais prováveis identificados que precisarão de mitigação apropriada para serem tratados no âmbito do Projeto CRRN: Os impactos ambientais estarão associados principalmente às obras civis de pequena e média escala planeadas no Componente 1, incluindo solo e água poluição de recursos, emissões de poeira e ruído, geração de resíduos perigosos e não perigosos e riscos de saúde e segurança ocupacional e comunitária, erosão do solo, remoção de vegetação. Estes riscos e impactos serão principalmente específicos do local (com foco nas áreas interferidas pelas obras civis), temporários, reversíveis e administráveis através de medidas de mitigação custo-efetivas. Os riscos e impactos sociais devem-se a intervenções que podem gerar algum grau de conflito social, danos e riscos para a segurança humana, associados ao facto de os empreiteiros terem de trabalhar num ambiente de conflito e envolverem-se no regresso dos deslocados internos às áreas libertadas.

E7. Plano de Gestão Ambiental e Social (PGAS)

As medidas de mitigação genéricas propostas serão personalizadas durante a realização de AIAS específicas do local para as estradas e pontes dos subprojectos individuais, de acordo com os requisitos do MTA e do ESF do Banco Mundial. Os seguintes instrumentos ambientais e sociais foram preparados como parte do QGAS para orientar a implementação do Projecto CRRN: O Plano de Envolvimento das Partes Interessadas (SEP) foi preparado para fornecer um quadro geral para a realização de envolvimento significativo das partes interessadas, consultas, participação na preparação e implementação do projecto, incluindo divulgação de informações públicas; Procedimentos de Gestão Laboral (LMP) que fornecem orientação sobre a gestão dos requisitos laborais do projecto, incluindo a abordagem das queixas dos trabalhadores e a regulamentação da conduta dos trabalhadores; Plano de Acção VG/SEA/SH para prevenir e responder adequadamente a incidentes de exploração e abuso sexual (SEA), bem como outras formas de violência baseada no género (VBG) para garantir que o projecto não tenha um impacto negativo desproporcional nas comunidades desfavorecidas e PAP vulneráveis; Descobertas fortuitas Procedimento para cuidar de descobertas fortuitas que possam ser encontradas como resultado de escavações civis e trabalhos de terraplenagem relacionados; um Plano de Gestão de Segurança para fornecer orientação sobre a utilização/envolvimento e operações do pessoal de segurança durante a implementação do projecto nas Províncias do Norte de Moçambique. Finalmente, o Plano de Compromisso Ambiental e Social (PCAS) foi desenvolvido para fornecer um resumo das medidas e ações materiais a serem implementadas pela ANE, IP para garantir resultados que sejam materialmente consistentes com o FSE durante a implementação do projeto.

E8. Arranjos de Implementação (a serem atualizados com base na validação pela ANE e BM)

A entidade implementadora do projecto proposto será o Fundo Rodoviário do Ministério das Obras Públicas, Habitação e Recursos Hídricos (MPWHWR). Para facilitar a implementação do projecto e a atribuição de responsabilidades, o Fundo Rodoviário celebrará acordos de cooperação juridicamente vinculativos e executáveis com a ANE, IP e quaisquer beneficiários institucionais do projecto. O projecto irá acolher uma Unidade de Implementação de Projectos (UPI) na ANE, IP para facilitar a implementação diária do projecto. O MPWHWR fornecerá a coordenação geral do projeto. O Fundo de Estradas será responsável pela implementação, coordenação com a ANE, IP, orçamentação, monitorização, gestão financeira e auditoria dos recursos do projecto. ANE, IP supervisionará a execução das obras, incluindo aquisições, padrões ambientais e sociais e gestão dos aspectos de engenharia. Dada a capacidade ambiental e social sobrecarregada. O apoio abrangente à ANE, IP para a capacidade institucional a todos os níveis está incluído no ESCP, aproveitando o apoio contínuo prestado. Outras instituições que estarão directamente envolvidas na implementação do Projecto CRRN poderão incluir o Ministério da Terra e Ambiente (MTA), Direcções Provinciais de Terra e Ambiente (DPTA), Direcção Nacional do Ambiente (DINAB) e Administração Nacional de Áreas de Conservação (ANAC), entre outras. outros.

E9. Monitoramento e Relatórios

A principal responsabilidade pela monitorização cabe à ANE, IP em estreita colaboração com as autoridades provinciais e agências reguladoras. O projecto será monitorizado ao longo da sua vida através de visitas ao local, relatórios e informações de terceiros, tais como através de mecanismos de reparação de queixas e da sociedade civil. O reporte trimestral ao Banco pela RF/ANE, IP sobre a implementação do desempenho ambiental e social do projecto deverá prestar especial atenção aos

grupos vulneráveis, incluindo pessoas com deficiência, e confirmar se os impactos e as medidas de mitigação planeadas foram adequadas ou se são necessários ajustes para cumprir os objetivos gerais do projeto e os compromissos ambientais e sociais acordados.

E10. Consulta Pública, Participação e Divulgação

Foram realizadas reuniões de consulta pública aos níveis central, provincial, distrital e comunitário. Foi utilizada uma combinação de reuniões consultivas físicas e virtuais, workshops e discussões em grupos focais de trabalho. Uma série de consultas iniciais às partes interessadas foram realizadas com pessoas-recurso chave, beneficiários e instituições em Maputo, a nível regional e distrital, entre 8 e 19 de Janeiro de 2024. Os projectos de instrumentos que incorporam os comentários da revisão da validação da ANE/BM foram enviados às diferentes instituições em aos níveis central e provincial para revisão e feedback entre 12 e 23 de Fevereiro de 2024. Foram realizados workshops de consulta regional em Cabo Delgado, Lichinga (Niassa) e Nampula, incluindo a nível comunitário entre 19 e 23 de Fevereiro, 2024. Em geral, todos os participantes da reunião saudaram o projecto e consideraram-no muito relevante para reabilitar e melhorar as estradas e pontes seleccionadas, o que irá melhorar significativamente a conectividade e segurança da rede rodoviária na região norte de Moçambique. Consulte o relatório de Consulta às Partes Interessadas contido no SEP para obter mais detalhes. O projecto e o ESMF Final serão divulgados no website da RF/ANE após a aprovação do Banco Mundial para recolher feedback e comentários de diferentes partes interessadas. Os documentos ambientais e sociais subsequentes (Avaliações de Impacto Ambiental e Social (ESIAs), bem como Planos de Gestão Ambiental e Social (PGAS)) para subprojectos específicos no âmbito do projecto CRRN serão divulgados tanto no País (websites da RF/ANE) como no website externo do Banco Mundial . Cópias destes documentos e deste QGAS serão disponibilizadas ao público em locais acessíveis em inglês e português.

E11. Orçamento para Implementação do QGAS

Todos os desenhos do Projecto serão alinhados com os princípios e procedimentos do QGAS e outros instrumentos preparados para o Projecto CRRN e respeitados durante a implementação do projecto. Estima-se que o orçamento total para a implementação do QGAS e outros instrumentos associados será de 3.100.000 dólares dos Estados Unidos. O projecto é instado a priorizar e financiar financeiramente as actividades listadas, a fim de mitigar os prováveis riscos e impactos ambientais e sociais das actividades do projecto.

E1. Introduction and Project Description

The World Bank will be supporting The Government of Mozambique (GoM) through the National Roads Administration, Public Institute (ANE, IP) and Road Fund, Public Fund (RF, PF) in implementing the Climate Resilient Roads for the North in Northern Region of Mozambique (P500488) (CRRN Project). The objective of the project is to enhance climate-resilient, safe and sustainable road connectivity in the Northern Provinces of Mozambique. The project will support the following activities: upgrading, rehabilitation, and maintenance of selected secondary and tertiary roads (adopting the Output and Performance-based Road Contracts (OPRC) approach), as well as the construction and rehabilitation of bridges and drainage structures in the secondary road network and installation of Bailey bridges in the tertiary road network. Community infrastructure (markets, schools, health centers, agriculture produce storage facilities) will be provided to rural population along segments of roads targeted by the project and incorporated into the works contracts. The Project will also support improvement of road safety and transport mobility activities; institutional strengthening and project management; and contingency emergency response activities. The project activities will take place in the Northern Provinces of Mozambique, namely Cabo Delgado, Niassa and Nampula. Specific locations, designs and detailed scope of subproject activities are not known at this stage, because their final selection will be determined later after undertaking specific Engineering Design Studies alongside the site specific ESIA's (post project approval).

E2. The Environmental and Social Management Framework (ESMF) Instrument

Since not all subprojects' activities, scope and implementation designs of CRRN Project are known/done at this stage, this Environmental and Social Management Framework (ESMF) sets out general principles, rules, guidelines, and procedures to assess and manage the environmental and social risks and impacts associated with the subprojects to be financed and provides general mitigations and E&S instruments to guide the development of the individual subprojects' E&S instruments during the implementation phase. The ESMF has been prepared in a consultative and participatory manner. Consultations with relevant stakeholders were conducted as part of preparation of the ESMF and other framework documents, namely, the Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP), Gender Based Violence (GBV)/ Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) Action Plan (GBV/SEA/SH Action Plan), and Chance Finds Procedure (CFP). The E&S Consultants and ANE organized individual institutional consultative meetings and broad public consultation workshops from January 15 – February 23, 2024, in Maputo, Pemba (Cabo Delgado), Lichinga (Niassa) and Nampula Provinces. Feedback from the consultation meetings and workshops have been incorporated into the various framework documents, respectively.

E3. National E&S Policy and Legal Requirements

This ESMF has been prepared in line with the applicable policies and laws of Mozambique and those of the World Bank ESF. A detailed presentation of the applicable National E&S Policies and Laws is contained in Chapter 3.

E4. World Bank E&S Framework (ESF), E&S Risk Classification (ESRC), and E&S Instruments

The 10 Environmental and Social Standards (ESSs) from the ESF, together with their Annexes, set out the requirements for Borrowers relating to the identification, assessment and management of

environmental and social risks and impacts associated with projects supported by the Bank through Investment Project Financing. **The project's Environmental and Social Risk Classification is rated as Substantial** considering that (i) the physical interventions planned under the project correspond mainly to rehabilitation or upgrade of existing secondary and tertiary road segments and bridges, which will occur within the existing rights of way, and are not expected to cause significant adverse risks and impacts on areas of high value or sensitivity, project activities are anticipated to be of moderate scope and their E&S risks can be mitigated with readily available and reliable measures.

E5. Environmental and Social Assessment and Management Procedures

The procedures for Environmental and Social Assessment (ESA) of Sub-projects will include screening of CRRN sub-projects; determination of E&S risks rating and defining of the required level of assessment/s. Once a sub-project has gone past the screening process, where necessary, the preparation of E&S instruments will be done and involve the preparation of Environmental and Social Impact Assessment (ESIA) and ESMP as per national laws and World Bank ESF. Implementation strategy of this ESMF requires full integration of E&S management issues as they will be identified in the respective subprojects ESIA and ESMP guided by this ESMF and included in the bidding documents and the Contractor's contracts to ensure implementation of the sub-projects as stated in the ESMP. The ESMP requires the Contractors to prepare and prepare site specific Contractor's ESMP (CESMP) and submit to Supervision Consultants and ANE, IP for review and approval prior to commencement of civil works. This ESMF will ensure that public consultations with relevant stakeholders (including vulnerable groups such as IDPs) of projects and sub-projects are conducted and well documented to inform the ESIA and design of the projects/sub-projects on the measures to undertake. This ESMF describes grievance redress mechanisms (GRMs) to be put in place to receive, evaluate, and resolve all grievances related to the CRRN Project and subprojects.

E6. The potential environmental and social risks, and mitigation measures

A generic impact mapping was undertaken to assess the likely potential CRRN Project E&S impacts and risks. The following are the most probable generic E&S impacts and risks identified that will need appropriate mitigation to be handled under the CRRN Project: The environmental impacts will be mainly associated with the small to medium-scale civil works planned under Component 1, including soil and water resources pollution, dust and noise emissions, generation of hazardous and non-hazardous waste, and occupational and community health and safety risks, soil erosion, vegetation clearance. These risks and impacts will be primarily site-specific (focusing on the areas interfered with by civil works), temporary, reversible, and manageable through cost-effective mitigation measures. The social risks and impacts are due to interventions which may generate some degree of social conflict, harm, and human security risk, associated with the fact that contractors will need to work in a conflict environment and engaging with returning IDPs to liberated areas.

E7. Environmental and Social Management Plan (ESMP)

The proposed generic mitigation measures will be customized during undertaking of site specific ESIA's for the individual subprojects' roads and bridges as per the requirements of MTA and the World Bank's ESF. The following E&S instruments have been prepared as part of the ESMF to guide implementation of the CRRN Project: Stakeholders Engagement Plan (SEP) has been prepared to provide an overall framework for undertaking meaningful stakeholders' engagement, consultations, participation in project preparation and implementation, including public information disclosure; Labour Management Procedures (LMP) which provide guidance on management of labour requirements of the project including addressing workers' grievances and regulating workers conduct; GBV/SEA/SH Action Plan to prevent and respond appropriately to incidences of sexual exploitation and abuse (SEA),

as well as other forms of gender-based violence (GBV) to ensure the project does not disproportionately negatively impact on the disadvantaged communities and vulnerable PAPs; Chance Finds Procedure to take care of chance finds likely to be encountered as a result of civil excavation and related earth works; a Security Management Plan to provide guidance on use/engagement and operations of security personnel during project implementation in the Northern Provinces of Mozambique. Finally, Environmental and Social Commitment Plan (ESCP) has been developed to provide a summary of material measures and actions to be implemented by ANE, IP to ensure outcomes that are materially consistent with the ESF during project implementation.

E8. Implementation Arrangements (To be updated based on validation by ANE & WB)

The implementing entity under the proposed project will be the Road Fund under the Ministry of Public Works, Housing and Water Resources (MPWHWR). To facilitate project implementation and allocation of responsibilities, the Road Fund will enter into legally binding and enforceable cooperation agreements with ANE, IP and any institutional beneficiaries of the project. The project will host a Project Implementation Unit (PIU) at ANE, IP to facilitate day-to-day project implementation. The MPWHWR will provide overall coordination for the project. The Road Fund will be responsible for implementation, coordination with ANE, IP, budgeting, monitoring, financial management, and auditing of project resources. ANE, IP will oversee execution of the works, including procurement, E&S standards, and management of the engineering aspects. Given the overstretched E&S capacity. Comprehensive support to ANE, IP for institutional capacity at all levels is included in the ESCP, building off ongoing support provided. Other institutions that will be directly involved in the implementation of CRRN Project may include Ministry of Land and Environment (MTA), Provincial Directorates of Land and Environment (DPTA), Environmental National Directorate (DINAB) and National Administration of Conservation Areas (ANAC) among others.

E9. Monitoring and Reporting

The primary responsibility for monitoring rests with ANE, IP in close collaboration with the provincial authorities and regulatory agencies. The project will be monitored throughout its lifetime through site visits, reporting, and information from third parties, such as through grievance redress mechanism and civil society. Reporting to the Bank on a quarterly basis by the RF/ANE, IP on the implementation of the project's environmental and social performance should pay particular attention to vulnerable groups, including persons with disabilities, and confirming whether the impacts and planned mitigation measures were adequate or whether adjustments are needed to meet the overall objectives of the project and the agreed environmental and social commitments.

E10. Public Consultation, Participation and Disclosure

Public consultation meetings were conducted at the central, provincial, district and community levels. A mix of physical and virtual consultative meetings, workshop, and discussions in working focus groups were used. A series of initial stakeholder consultations were carried out with key resource persons, beneficiaries, institutions in Maputo, Regional and District level between January 8 – 19, 2024. The draft instruments incorporating the ANE/WB validation review comments were sent to the different institutions at the central and provincial levels for review and feedback between Feb. 12 – Feb. 23, 2024. Regional consultation workshops were held in Cabo Delgado, Lichinga (Niassa) and Nampula, including at the community level between Feb. 19 – Feb. 23, 2024. In general, all meeting participants welcomed the project and considered it very relevant to rehabilitate and upgrade the selected roads and bridges which will greatly improve the road network connectivity and safety in the northern region of Mozambique. Please refer to the Stakeholder Consultation report contained in the SEP for more

details. The draft and the Final ESMF will be disclosed on RF/ANE website following World Bank approval to collect feedback and comments from different stakeholders. Subsequent E&S documents (Environmental and Social Impact Assessments (ESIAs) as well as Environmental and Social Management Plans (ESMPs)) for specific subprojects under the CRRN project will be disclosed both in Country (RF/ANE websites) and at the World Bank external website. Copies of these documents and this ESMF will be made available to the public in accessible locations in English and Portuguese.

E11. Budget for Implementation of the ESMF

All Project designs will be aligned to the principles and procedures of the ESMF, and other instruments prepared for the CRRN Project and adhered to during project implementation. It is estimated that the total budget for the implementation of the ESMF and other associated instruments will be 3,100,000 United States Dollars. The project is urged to prioritize and financially fund the listed activities in order to mitigate the likely environmental and social risks and impacts of the project activities.

1. INTRODUCTION

1.1 Background of the Project

Due to recurrent climatic impact, the road network has suffered extensive damage over the last 20 years, with substantial sums of financial resources being diverted from network improvement to the repair of flood-related damage. As the Mozambican road network has a low redundancy, those disruptions sometimes isolate communities for extended periods of time and thus have a significant detrimental impact on their local economics. In Cabo Delgado province, the cyclones, heavy rains and floods destroyed various infrastructures including roads and bridges, hitting an already vulnerable population, which was in many areas affected by terrorism violence and poverty. In the districts of Quissanga, Mueda, Muidumbe, Macomia, Metuge, Mecufi and Ibo (the most affected) entire villages were destroyed with communities in need of humanitarian assistance which, despite the improvements in terms of security caused by terrorism, the poor condition of roads and bridges has created difficulties for the transportation of the human aid for the population.

The delays in rebuilding of road infrastructures caused by insufficient financial resources, had increased the degradation of the road network and bridges, especially steel bridges, causing partial isolation of the Mueda, Quissanga, Muidumbe, Macomia, Mecufi and Metuge districts, affecting around 378,762 people. As the security situation has improved, there is a need to urgently reconstruct the affected road network to ensure the implementation of all reconstruction projects in Cabo Delgado province and provide the minimum conditions for the movement of goods and people. (Source: CRRN Project Concept Note, 2023). The GoM requested the World Bank to help develop a long - term program of socio-economic integration through Climate Resilient Roads for the North in Northern Region of Mozambique. The Bank has agreed to fund a US\$ 125 million envelope to finance the project. The Government of Mozambique (GoM) through the National Roads Administration, Public Institute (ANE, IP) and Road Fund, Public Fund (RF, PF) is therefore preparing the implementation of the **Climate Resilient Roads for the North (CRRNP) Project** to enhance climate-resilient, safe and sustainable road connectivity in the Northern Provinces of Mozambique.

The project implementing entity under the proposed project will be the Road Fund under the Ministry of Public Works, Housing and Water Resources (MPWHWR). To facilitate project implementation and allocation of responsibilities, the Road Fund will enter into legally binding and enforceable cooperation agreements with ANE, IP and any institutional beneficiaries of the project. The project will host an implementation unit (PIU) at ANE, IP to facilitate day-to-day project implementation.

The MPWHWR will provide overall coordination for the project. The Road Fund will be responsible for implementation, coordination with ANE, IP, budgeting, monitoring, financial management, and auditing of project resources. ANE, IP will oversee execution of the works, including procurement, E&S standards, and engineering aspects. The existing central PIU at ANE, IP in charge of ongoing World Bank-financed projects will be responsible for this project. Additional PIU staff can be assigned/hired to enhance the PIU's capacity if needed.

1.2 Environmental and Social Management Framework (ESMF) - Rationale and Objectives

Rationale of the ESMF: The project activities will take place in the Northern Provinces of Mozambique, namely Cabo Delgado, Niassa and Nampula. Specific locations and/or detailed scope of subproject activities are not known at this stage, because their final selection will be determined later after undertaking specific subproject detailed engineering studies during the implementation phase. It is

anticipated that both positive and negative environmental and social impacts will be generated that will affect the nearby biophysical and social environment. To preclude and manage the anticipated environmental and social risks and impacts of the project, applicable E&S management instruments shall be prepared. However, given that precise designs and exact extent of the proposed project activities are not yet known, it is difficult to identify the actual risks and impacts of the project activities and manage them in the context of traditional Environmental and Social Impact Assessment (ESIA). This Environmental and Social Management Framework (ESMF) has therefore been prepared to guide in undertaking the site specific ESIA/s during the implementation phase of the project. At this stage, the ESMF identifies generic potential environmental and social risks and impacts of proposed Project activities and proposes generic standard E&S measures for assessing, avoiding, mitigating, and managing these during the planning/pre-construction, construction, and operation and management (O&M) stages of the subprojects. It maps out the laws and regulations of the Republic of Mozambique and the World Bank policies applicable to the Project, and describes the principles, approaches, and implementation arrangements to be followed. The overall goal of the ESMF is to ensure that decision making in subsequent stages of the project is informed and influenced by environmental and social considerations.

When the designs and exact scope of each subproject under the CRRN project are defined and known, ANE, IP will develop site specific Environmental and Social Impact Assessments (ESIA)/s and Resettlement Action Plan/s (RAP), as required, in accordance with the Government of Mozambique Environmental Management Act (1996), and Environmental Impact Assessment Guideline, and the World Bank's Environmental and Social Framework, including applicable World Bank Group Environmental Health and Safety Guidelines.

Objectives and scope of the ESMF: The main objective of the Environmental and Social Management Framework (ESMF) is to provide general procedures, guidelines, and methodologies as a framework for the assessment, management, and monitoring of environmental and social impacts of the CRRN project. The ESMF will help to establish a mechanism to systematically identify, predict, evaluate, and manage beneficial and adverse environmental and social impacts of the project activities, design enhancement measures for beneficial impacts, and recommend and implement mitigating measures for adverse impacts to comply with the requirement of National policies and laws and the World Bank Environmental and Social Framework. The specific objectives of the ESMF are to:

- develop/establish clear procedures and tools (including checklists, guidelines) for environmental and social screening, impacts assessment, planning, review, approval, implementation, and monitoring of subprojects to be financed under the CRRN project;
- present the policy, legal and institutional framework related to the environmental and social context applicable to the Proposed CRRN project and its potential subprojects;
- outline the process to identify potential environmental and social risks and impacts associated with the proposed subprojects project and specify a methodology for preparing the environmental and social management and monitoring plans;
- describe the implementation and institutional arrangements and specify appropriate roles and responsibilities for managing environmental and social impacts over the project implantation period and indicate implementation strategies of the major issues outlined in the Environmental and Social Management Framework;

- outline the necessary reporting procedures, for managing and monitoring environmental and social concerns associated with the proposed subprojects;
- determine the capacity building components (including training and technical assistance) for the successful realization of the provisions stated in the Environmental and Social Management Framework and establish the Project funding required to implement the ESMF requirements;
- introduce an environmental and social due diligence process to present methodologies, instruments, procedures, and role and responsibilities for environmental and social management and provide practical information resources for implementing the ESMF;
- indicate implementation strategies of the major issues outlined in the Environmental and Social Management Framework and Environmental and Social Management Plan; and
- a reference and guiding manual to be used by key stakeholders who are involved in the planning, implementation, management, and operation of the proposed subprojects under CRRNP. The ESMF also serves as an instrument to guide and to be used by ANE, IP and other relevant key stakeholders, such as Ministries Departments, Regional and District Authorities, Non-Governmental Organizations, and Community Based Organizations and Local Traditional Leaders.

1.3 Approach and Methodology for ESMF's Preparation

The ESMF has been prepared in accordance with the World Bank ESF. It has been prepared using both primary and secondary data sources. The methodologies adopted in the development of this ESMF include literature review, consultations with key stakeholders, community meetings where possible, and focus group discussions. Site visits on potential road and bridge subprojects within the project area were also conducted. The rationale of the consultations was to solicit views of a cross-section of people, district, regional and central government levels. An account of the existing biophysical and social environment conditions was collected and discussed under the baseline information section of this ESMF.

The details of methodologies employed to prepare this ESMF are discussed below:

- Literature and project background documents review;
- Undertaking stakeholder consultations and field visits;
- Identification of likely risks and impacts associated with the interventions and preliminary assessment of their significance;
- Identification of appropriate generic mitigation measures for the likely potential negative environmental and social impacts; and
- Compilation of generic management and monitoring plan for addressing the impacts during planning and design, implementation, operation, and maintenance of the project activities.

Literature Review: The ESMF preparation involved a literature review of the national legal framework that is anticipated to guide the operations and implementation of the proposed activities. The review provided an in-depth understanding of the planned project and its associated risks and impacts that should be considered. A review of the existing baseline information and relevant literature materials were also undertaken to obtain further and deeper understanding of the proposed Project. A desk review of the World Bank ESF, Standards and EHSs was also conducted.

Stakeholder Consultations and Field visit: The rationale of the extensive consultations was to solicit views of a cross-section of people, at the local, district, regional and central government levels. Stakeholder consultations help to identify and promptly address the concerns of different stakeholders and the PAPs regarding their rights and interests.

A series of initial stakeholder consultations were carried out with key resource persons, beneficiaries, institutions in Maputo, Provincial and District level between January 15 – February 23, 2024. In general Portuguese was the communication language with most Stakeholders/PAPs. At community levels (especially with vulnerable groups), local languages were used as communication media through translation (translator). English was applied for stakeholders at central level in Maputo. Notification means was through letters, e-mail, phone calls, as well as information material and community meetings, especially with local community and vulnerable groups. A mix of physical and virtual consultative meetings, workshop, and discussions in working focus groups were used.

The draft instruments incorporating the ANE/WB validation review comments were sent to the different institutions at the central and provincial levels for review and feedback between Feb. 19 – Feb. 23, 2024. Regional consultation workshops were held in Cabo Delgado, Lichinga (Niassa) and Nampula, including at the community level between Feb. 19 – Feb. 23, 2024. The discussions in meetings were conducted and facilitated by ANE, IP Officers and the consultants.

The study team undertook site visits between January 15 – 19, 2024 and between February 19 – 23, 2024 in Cabo Delgado, Nampula, and Niassa regions. The field surveys enabled the team to identify the generic environmental and social settings of the proposed subprojects areas and identify some of the existing conditions on a potential roads and bridges to be rehabilitated in the corridor. The site visits allowed the team to conduct consultations with various relevant stakeholders, including project beneficiaries and the likely affected people.

The findings of consultations are presented under Chapter 6 and a list of consulted stakeholders has been attached in Annex 6 and Annex 7.

2. PROJECT DESCRIPTION AND COMPONENTS

2.1 Project Components

The project consists of four (4) components, namely:

A. Component 1: Climate Resilient, Safe and Sustainable Improvement of Roads.

This component will support the upgrading of roads and bridges.

Sub-component 1.1: Improvement and maintenance of road network. This sub-component will focus potentially on the following: (i) Upgrade of 52km of the secondary road N381 Mueda – Xitaxi; and 15km of the tertiary road R762 Muepane – Quissanga; and rehabilitation of 25km of sealed secondary road N380 Muagamula – Xitaxi in Cabo Delgado province, including the rehabilitation or reconstruction of culverts and other drainage infrastructure; (ii) Consultancy services for the preparation of concept design and bid documents for upgrading/rehabilitation of roads, including for follow-on operations, and the monitoring of road works; and (iii) Land acquisition and resettlement of project affected persons. Road safety audits/inspections will be conducted at different stages of the project, speed management and improved Vulnerable Road User (VRU) facilities will be ensured across project roads and bridges. Pedestrian sidewalks, and cycle lanes in urban and community centers, including wider shoulders along road segments will be introduced for non-motorized traffic to increase road safety of VRUs. Through this Subcomponent, Community infrastructure (markets, schools, health centers, agriculture produce storage facilities) will be provided to rural population along segments of roads targeted by the project and incorporated into the works contracts.

Table 2-1: Roads for preparation of concept designs and bidding documents (Phase II)

ROAD	LENGTH (KM)	INTERVENTION	PROVINCE
R775/1260 Palma – Namoto	47	Upgrade	C. Delgado
R760 Muxara – Mecufi	43	Upgrade	C. Delgado
N361 Lichinga - Lago Niassa	98	Rehabilitation	Niassa
N360 Metarica - Marrupa	167	Upgrade	Niassa
R733/1211 Lussimbessé – Matchedje	206	Upgrade	Niassa
R657 Magige - Cuamba	93	Upgrade	Niassa
R689 Angoche - Monapo	160	Upgrade	Nampula
Total	814		

Sub-component 1.2: Improvement of bridges and drainage structures (US\$38.1 million). This sub-component will focus on: (i) Construction of four concrete bridges along the secondary road N380 in Cabo Delgado (Mirohote (45m), Muaguamula (40m), Muera 2 (30m) and Nango (35m); and rehabilitation of Muera 1 (55m) concrete bridge, (ii) Consultancy services for the preparation of concept design and bid documents, and the monitoring of the bridge works in Cabo Delgado province; (iii) acquisition and installation of 1,500m of bailey/metallic bridges in tertiary roads in all three

northern provinces, including the construction of substructure of the bridges; and (iv) Consultancy services for design and preparation of bid documents for construction of the substructure for installation of the bailey/metallic bridges in all three northern provinces.

B. Component 2: Improvement of Road Safety and Transport Mobility.

The Safe System approach for road safety will be an integral part of the road design and implementation. This component will finance:

- the enhancement of the capacity of the National Institute of Road Transport (INATRO) on road safety regulation, inspection and supervision, and ANE,IP on road safety engineering.
- a pilot program on safe road infrastructure, inclusive road safety programs targeting youth, awareness-raising and dissuasive measures, and improving gender disaggregated crash data collection.
- first responder training for youth across project roads.
- a “safer route to school” pilot to improve access to schools.
- capacity building and accreditation on road safety audit; and
- a study on improving transport services in rural areas, including addressing the recommendations of the report.

C. Component 3: Institutional Strengthening and Project Management.

Component 3 will include incremental operating costs and institutional strengthening activities. It will cover:

- an institutional assessment of the road sub-sector.
- road asset management.
- enhancement of climate resilience in planning and management of road infrastructure.
- road and traffic data collection.
- preparation of a road maintenance strategy.
- study on facilitation of public private partnerships in road rehabilitation and maintenance; (vii) development of community resilience committees led by women to support emergency preparedness and response; and
- promotion of women’s employment in the road sub-sector. Effort will be made to incorporate a skills development and livelihoods sub-component to provide opportunities for conflict-impacted local labour in the road works.

This component will also provide technical assistance for the implementation of the project including procurement, FM and audits, environmental and social oversight, and M&E.

Table 2-2: CRRN Project Component Activities

ACTIVITY	ESTIMATED COST (US\$ MILLION)
Road Asset Management	0.5

Equipment and road and traffic data collection	0.8
Enhancement of climate resilience of roads	0.2
Technical assistance for project implementation	0.8
Preparation of Maintenance strategy	0.1
Development of community resilience committees	0.1
Project operating costs	0.9

D. Component 4: Contingent Emergency Response

This component will facilitate access to rapid financing by allowing reallocation of uncommitted project funds in the event of a natural disaster, either by a formal declaration of a national or provincial government of emergency or upon a formal request from the Government of Mozambique.

2.2 Project Location

As shown in Figure 1 the project targeted area is essentially the province of Cabo Delgado specific roads (52km of the secondary road N381 Mueda – Xitaxi; 15km of the tertiary road R762 Muepane – Quissanga; and rehabilitation of 25km of sealed secondary road N380 Muagamula – Xitaxi), and installation of 1,500m of bailey/metallic bridges in tertiary roads in all three northern provinces (Cabo Delgado, Niassa and Nampula), including the construction of substructure of the bridges interventions in bridges. Most of the planned physical interventions are focused in rural areas, mainly in Cabo Delgado. At the current stage, the final scope of most of the activities to be financed is not concluded yet. The engineering designs for the 92 km of secondary and tertiary roads to be upgraded under Subcomponent. 1.1 and the five concrete bridges to be constructed and rehabilitated along road N380 will be financed and developed during implementation phase of the project.

3. ENVIRONMENTAL AND SOCIAL POLICIES, REGULATIONS AND LAWS

3.1 Introduction

The ESMF has been prepared in compliance with the national legal framework, WB Environmental and Social Standards and relevant international standards and guidelines. This chapter provides relevant environmental and social national and international legal frameworks applicable to the project.

3.2 Mozambique Environmental and Social Legal Framework

Since the nineties, Mozambique has been undertaking an enormous legal and institutional reform movement to improve the country's ability to manage the environment and turn it into a more sustainable one. The reform has been under implementation in the form of:

- a) adherence to and adoption of a series of international and regional environmental protection and conservation conventions and protocols;
- b) approval of a significant set of legislation with direct and indirect implications to environmental and social protection;
- c) creation of specific public institutions or strengthening of existing institutions dedicated to both environmental and social management.

The Table below provides summary of applicable National E&S Legal and Institutional Framework while the detailed write-up and review of the same is provided under Annex 9:

Table 3-1: Applicable National E&S Legal and Institutional Framework in Mozambique

Legal and Institutional Framework	Relevance	Responsible Institution
National Environmental Policy (Resolution No. 5/95)	Yes	Ministry of Land and Environment-MTA
Environmental Law (Law No. 20/97)	Yes	Ministry of Land and Environment-MTA
Regulation for Environmental Impact Assessment - ESIA (Decree No. 54/2015, of December 31st)	Yes	Ministry of Land and Environment-MTA
Regulation on the Environmental Audit Process (Decree No. 25/2011)	Yes	Ministry of Land and Environment-MTA
Regulation for Environmental Inspections (Decree No. 11/2006)	Yes	Ministry of Land and Environment-MTA
Procedures on environmental licensing (Ministerial Diploma No. 129/2006)	Yes	Ministry of Land and Environment-MTA
Public Participation methodologies and procedures (Ministerial Diploma No. 130/2006)	Yes	Ministry of Land and Environment-MTA
Environmental Law (Law No. 20/97)	Yes	Ministry of Land and Environment-MTA
Regulation for Environmental Standards and Effluent Emission (Decree No. 18/2004 (as amended by Decree No.67/2010)	Yes	Ministry of Land and Environment-MTA

Water quality for human consumption (Ministerial Diploma n. 9180 / 2004)	Yes	Ministry of Public Works, Housing and Water Resources
Water Policy (Resolution No. 46/2007)	Yes	Ministry of Public Works, Housing and Water Resources
Water user use (Law No. 16/91)	Yes	Ministry of Public Works, Housing and Water Resources
Environmental Quality Standards and Effluent Emissions Decree No. 18/2004	Yes	Ministry of Land and Environment-MTA
Pollution Law (No. 20/97)	Yes	Ministry of Land and Environment-MTA
Regulation on urban solid waste management (Decree No. 94/2014)	Yes	Ministry of Land and Environment-MTA
Hazardous Waste Management (Decree No. 83/2014)	Yes	Ministry of Land and Environment-MTA
Land Policy (Resolution No. 10/95)	Yes	Ministry of Land and Environment-MTA
Land use rights (Law No. 19/1997)	Yes	Ministry of Land and Environment-MTA
Protection Zones (Decree No. 66/98)	Yes	Ministry of Land and Environment-MTA
Regulation for the Resettlement Process Resulting from Economic Activities (Decree No 31/2012)	Yes	Ministry of Land and Environment-MTA
Technical Guideline of Planning and Implementation Process of Resettlement Plans (Ministerial Diploma No. 156/2014)	Yes	Ministry of Land and Environment-MTA
Territorial Planning (Decree No. 23/2008)	Yes	Ministry of Land and Environment-MTA
Guidelines for the Expropriation Process Resulting from Territorial Planning (Ministerial Diploma No. 181/2010)	Yes	Ministry of Land and Environment-MTA
Cultural Heritage (Law No. 10/88)	Yes	Ministry of Land and Environment-MTA
Biodiversity protection (Law No. 20/97)	Yes	Ministry of Land and Environment-MTA
Forest and wildlife protection (Law No. 10/99)	Yes	Ministry of Land and Environment-MTA
Conservation areas (Law No. 16/2014)	Yes	Ministry of Land and Environment-MTA
Environment and Climate Change Policy- Briefs (2011)	Yes	Ministry of Land and Environment-MTA
National Climate Change Adaptation and Mitigation Strategy (2012)	Yes	Ministry of Land and Environment-MTA
Labour Law (23/2007)	Yes	Ministry of Labour, Employment, and Social Security
Employment and Labour Law (2021)	Yes	Ministry of Labour, Employment, and Social Security
Protection of Workers with HIV and AIDS (Law nº 5/2002)	Yes	Ministry of Labour, Employment, and Social Security

Labour inspection (Decree nº 45/2009)	Yes	Ministry of Labour, Employment, and Social Security
Labour relations (Law Nº 23 /2007)	Yes	Ministry of Labour, Employment, and Social Security
Family Law 10/2004 of 25 August 2004	Yes	Ministry of Gender, Children and Social Action
Law Nr 29/2009 on Domestic Violence 2009	Yes	Ministry of Gender, Children and Social Action
Decree 109/2014 on the Regulation of the Use of the Roads and their Protection Zones	Yes	Ministry of Land and Environment-MTA
Land Law (Law 19/97)	Yes	Ministry of Land and Environment-MTA
Decree No 43/ 2007 which approves the regulation of water licenses and concessions	Yes	Ministry of Public Works, Housing and Water Resources

3.3 Environmental and Social Assessment Process in Mozambique

The EIA process in Mozambique is guided by the Decree 54/2015 establishes and Environmental Impact Assessment Regulation (Decree 54/2015) for development projects. The Ministry for Land and Environment (MTA) is responsible for administration of the ESIA process.

3.3.1 Environmental and Social Assessment Screening Process

The first step of the ESIA process in Mozambique is screening of the proposed developmental project, where the activities are categorized. It is at this stage that the proposed project is determined whether a full, simplified or no ESIA is required in order to receive the permit after approval by the MTA through multi-sector technical review committee. If the proposed project is fully screened and determined that it will require a full ESIA or Simplified ESIA, then a Client is asked to undertake a Scoping study.

The decision on whether a proposed project requires a full ESIA or Simplified ESIA or no ESIA is based on several factors, including a description and justification of the activity, the legal framework of the activity, and a short description of the environmental and the socio-economic conditions of the project area. At this stage, the authority may not approve the project when substantial issues are identified. The screening results in the rejection of the activity's implementation or in the categorization of the activity in one of four project categories.

- Category A+ requires full ESIA and the supervision and review of (an) independent expert (s);
- Category A requires only a full ESIA;
- Category B requires a simplified ESIA; and
- Category C requires no ESIA but compliance with General Procedures of Good International Practice in Environmental Management in the form of an environmental management plan.

The screening decision is based on several criteria, including: the number of affected people and communities; the type of ecosystems, plants and animals affected; location and extension of the affected area; probability, nature, duration, intensity, and significance of the risks and impacts; direct, indirect, potential, global and cumulative impacts; and reversibility and irreversibility of the impacts.

Table 3-2: Summary of Project Categorization based on ESF-ESS1

Aspect	High Risk	Substantial Risk	Moderate Risk	Low Risk
Project type, location, sensitivity, scale	Complex large to very large scale in sensitive location(s).	Not as complex; large to medium scale not such sensitive location.	No activities with high potential for harming people or environment; located away from sensitive areas.	Few or no adverse risks and impacts.
Nature and magnitude of risks & impacts, available mitigation	Mitigation unproven: unable to entirely address significant risk; high residual value.	Mitigation more reliable: significant risks but possible to avoid or address.	Easily mitigated: site specific, low magnitude risks.	Nothing to mitigate- no further assessment after screening.
Borrower capacity and commitment	Challenges and concerns about track record regarding E&S issues, significant stakeholder engagement capacity, commitment, track record concerns.	Some concerns about borrower track record, engagement capacity but readily addressed.	Sufficient borrower experience, track record, stakeholder engagement capacity.	Minimal or negligible risks to and impacts on human populations and/or the environment
Context of risk relevant to ES measures	Significant effects on ability to mitigate risk - significant contextual risks outside project control impacting on E&S performance and outcomes.	Some effects on ability to mitigate risk - known and reliable mechanisms to prevent or minimize, enforcement is weak in some respects, some stakeholder engagement concerns but readily addressed.	No effects on ability to mitigate risk—no contextual risks with effects on E&S performance	Negligible risk.

3.3.2 Environmental and Social Assessment Scoping Process

All activities that fall under Category A+ or A require scoping, but to a different extent. For activities of Category A+ and A, an Environmental Pre-Viability Study (EPDA) that also includes the development of the ToR must be done. Activities in Category B only require Terms of References for the Simplified Environmental Report (SER), but no EPDA. The proponent is responsible for writing the EPDA. An essential aspect is that the proponent identifies the likelihood of negative E&S impacts and proposed adequate and acceptable mitigation measures. The EPDA report is reviewed by a multi-sector technical review committee. The technical committee reviews the scoping report of A+, A and B projects. It provides comments and asks for additional information to the proponent when regarded necessary. The scoping process helps the project developer to identify key environmental and social issues associated with the proposed project. Equally, Scoping may be an end of the ESIA process if the risks and impacts found at the end of the scoping exercise are insignificant and the proposed mitigation measures are commensurate to the likely E&S risks and impacts.

3.3.3 Environmental and Social Impact Assessment Process

The developer is responsible for the assessment process. The ESIA process is guided by the approved ToR that is established during the scoping stage. The methods of the assessment undertaken in the ESIA process must be specified in the ToR. The ESIA and simplified reports have to be submitted to MTA for review and consideration for approval.

3.3.4 ESIA Review Process

A temporary multi-sector technical review committee is set up to review the EPDA. The same committee also reviews the ESIA report. The committee submits a report with its comments to the Environmental Management Authority (MTA), which also considers all the comments made by the public during the review process. For A+ projects, the review report of the independent expert is included (mechanism not yet operational).

During the review process, the proponent may have to submit additional information to assist the committee. The proponent has 10 working days to comply with these requests. The findings of the report of the committee form the basis for the decision-making process by MTA regarding the granting of the Environmental License.

The review of the Simplified Environmental Report (SER) entails the set-up of a technical committee comprising of various (local) representatives and technical experts. Through the review committee relevant expertise from within government can be involved in the review. This committee may request additional information from the developer if the committee is not satisfied with information and relevant documentation in the draft ESIA Report. If the review is satisfied with the additional information provided, the committee provides recommendations to the competent authority (e.g., MTA) regarding the issuing of the Environmental License.

The issuance of the Environmental License must be based upon an approved ESIA of the proposed activity. Environmental Licences are valid for a period of five years. They are then renewable for an equal period. The license is a prerequisite for the issuance of any other license or permit that may be legally required. The decision on the ESIA approval and the issuance of the license are both taken by the central ESIA authority. MTA is the competent authority for activities of Category A+ and A, and its provincial departments may issue the license for Category B and C projects.

3.3.5 ESIA Flow Chart/ Process in Mozambique

The following figure provides the EIA Flowchart that is used in Mozambique to be referenced during the EIA process. The word “Proponent” in the Flowchart is interchangeably used with the “Developer”. Therefore, it must be known by the public and when the ESIA Flowchart says “Proponent” it means it is referring to the Developer.

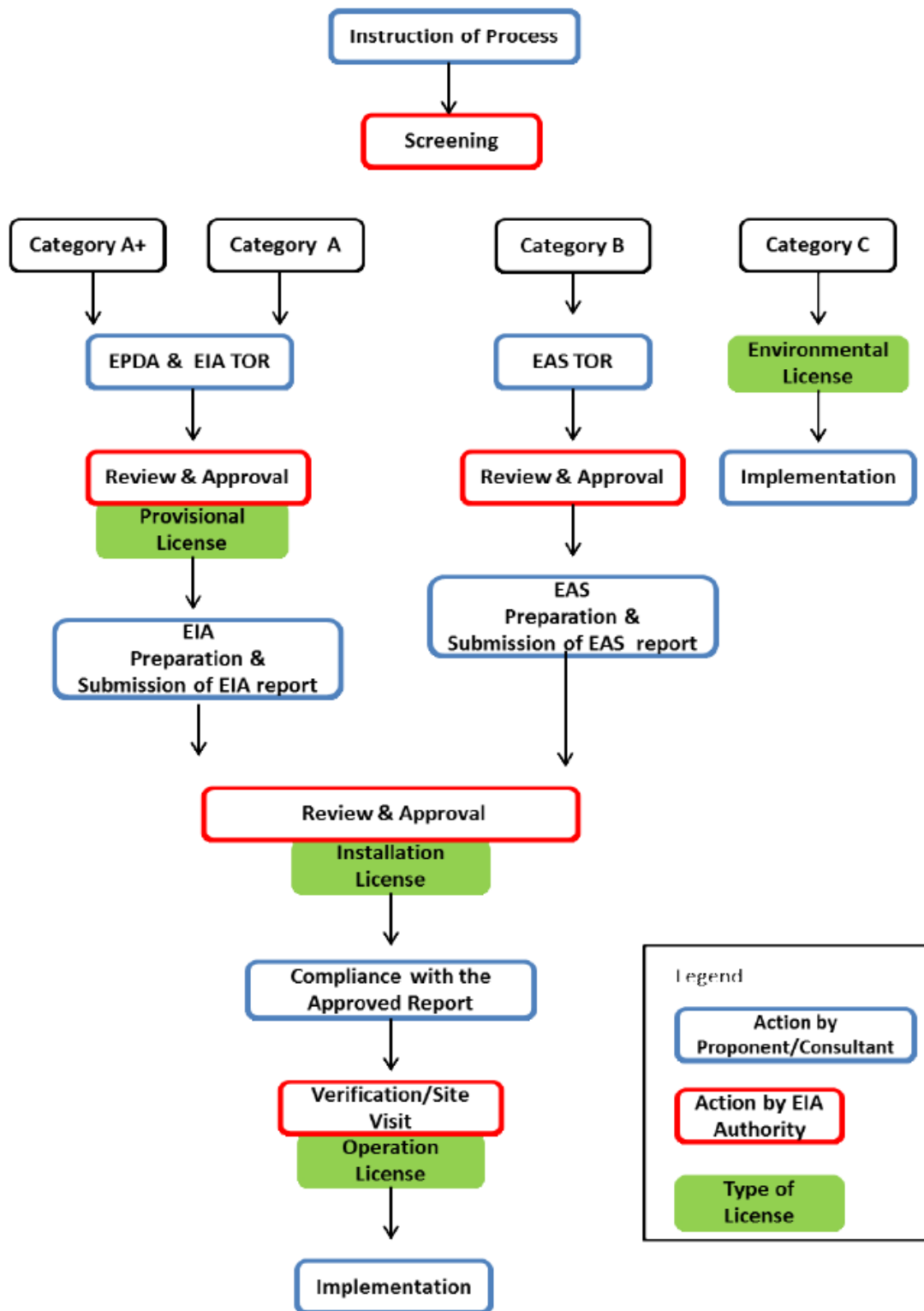


Figure 3-1: EIA Process Flowchart for Mozambique

3.4 Applicable World Bank Policies, Standards and Guidelines

In 2018, the World Bank Group published its Environmental and Social Framework (ESF) which comprises its Environmental and Social Vision and Policy for Investment Project Finance, complemented by a set of ten Environmental and Social Standards (ESS). The World Bank ESF and the World Bank Group General Environmental, Health and Safety Guidelines (ESHGs) (2007) set out the World Bank's commitment to sustainable development, ending extreme poverty and promoting shared prosperity. Additional guidelines applicable to CRRNP include the Good Practice Note for Road Safety, and ESHGs for Toll Roads, and ESHGs Extraction of Construction Materials.

The following table presents the standards and their relevance to CRRN project.

Table 3-2: Review of World Bank Environmental and Social Standards

Environmental and Social Standard relevance in relation to the project and how their individual requirements shall be met by the project	Relevance
<p>ESS1: Assessment and Management of Environmental and Social Risks and Impacts</p> <p>The physical interventions planned under the project correspond mainly to rehabilitation or upgrade of existing secondary and tertiary road segments and bridges, operation of auxiliary infrastructure (workers campsites, borrow pits, quarries, concrete/bitumen plants, etc.), will pose environmental and social risks and impacts, and thus requiring conduct of environmental and social assessment. This renders ESS1 relevant/ applicable.</p> <p>Since at this stage the sub-projects are not designed and their final scope and extent not fully determined, it is not possible to undertake site specific ESIA's to meet the requirements of this ESS, and therefore an ESMF has been prepared to guide assessment and management of E&S risks and impacts. During the implementation phase, sub-projects shall be screened and where necessary, site specific ESIA's/ESMPs will be undertaken alongside the engineering designs, integrated into the civil works bidding and contracting process, Contractors will prepare C-ESMPs prior to works; and related sub-Management Plans accordingly implemented with the overall guidance provided in the ESMF. Alongside the ESMF, the following assessments and/ or Instruments have been undertaken/ developed, respectively: Social Assessment, GBV/SEA/SH risk assessment and Action Plan, Security Risk Assessment and Management Plan.</p>	Yes
<p>ESS2: Labor and Working Conditions</p> <p>The Project will use different types of labor, including civil servants, direct workers, contract workers and primary supply workers, and this makes ESS2 relevant/ applicable to the project. Accordingly, a LMP has been prepared as part of this ESMF and will address labor requirements applicable to all project workers in line with ESS2 and Mozambican labor regulations. The LMP has detailed out how workers will be managed throughout the project cycle and include guidelines for a worker's GRM, management of various risks related to health and safety of workers and surrounding communities; OSH/ES; labor disputes; discrimination against vulnerable groups; child labor and forced labor and preparation and implementation of the Contractor's procedures to address labor management risks, including potential security risks to workers due to the conflict in the area. The SEA/SH risk assessment and action plan prepared for the project ensures that any risks in the context of labor use are adequately addressed.</p>	Yes
<p>ESS3: Resource Efficiency and Pollution Prevention</p>	Yes

<p>ESS3 is relevant/ applicable to CRRNP since the civil works financed under Component 1 are expected to require sourcing of construction materials from borrow pits and quarries located within the project area of influence, as well as energy and water. The resource amounts required are unknown at the current stage, but as part of the ESMF and site-specific instruments (ESIAs/ESMPs), the Borrower will define measures to ensure the efficient use of those resources. The ESMF has provided generic measures to address these adverse risks and impacts, and these shall be refined during development of site-specific ESIAs/ESMPs and customized as appropriate.</p>	
<p>ESS4: Community Health and Safety</p> <p>ESS4 is relevant/ applicable since the planned civil works may lead to adverse risks for the surrounding communities. The ESMF identified and assessed the potential community H&S risks generated by the project and defined generic measures for their mitigation. The site-specific ESMPs and C-ESMPs to be prepared by the ANE, IP and the Contractors, respectively, during project implementation phase will detail such site-specific measures building upon the generic ones provided in the ESMF.</p>	Yes
<p>ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</p> <p>ESS5 is relevant/ applicable because construction and rehabilitation under the Project civil works could involve some land acquisition and resettlement due to encroachment of some sections of the selected road sections ROW. While the scale of land acquisition and resettlement cannot be assessed at this stage, it is not expected to be large scale. Any land taking for Partial Protection Zones (PPZs) will require the award of user rights to any people living within these zones. Temporary land acquisition is expected due to civil works, materials and machinery storage, worker camps, access roads, sourcing of construction material from borrow pits and quarries and route diversions. ANE, IP and/or the Contractors will develop site-specific RAP/s or Livelihoods Restoration Plans (LRP) that will include measures for temporary or permanent land acquisition, mitigation of land use change or restriction of access to livelihoods before civil works commence for road/bridge works.</p>	Yes
<p>ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</p> <p>ESS6 is relevant because the project will finance the upgrade of R762 Muepane-Quissanga (15 km) and the rehabilitation of concrete bridges located within the Quirimbas National Park (QNP). This road segment and bridges were built before the Park's creation and include the network serving the communities living in the Park, being critical for the accessibility of remote vulnerable communities to infrastructure financed by the project along main road segments. The civil works will be limited to the existing rights of- way and small-scale, in line with the QNP Management Plan, which considers the execution of small interventions aiming at the economic development of rural communities living in the Park. All required auxiliary infrastructure will be located outside the park limits. The ESMF includes and site-specific ESIA/ESMPs will also include exclusion conditions and mitigation measures to ensure the interventions within the park area do not result in significant adverse impacts on biodiversity.</p>	Yes

<p>ESS7: Indigenous Peoples/Historically Disadvantaged Traditional Communities of Sub-Saharan Africa</p> <p>Not Applicable, since there are no communities considered within the context of Indigenous Populations.</p>	No
<p>ESS8: Cultural Heritage</p> <p>There is no indication of potential impacts on cultural heritage as rehabilitation works will focus on already existing roads and bridges. If potential impacts on cultural heritage near or on any project sites are identified, cultural heritage plan(s) will be developed in accordance with ESS8 and national law, including chance find procedures. The ESMF has included and developed a Chance Find Procedure according to ESS8 and the national law, and this will be customized by each site specific ESIA/ESMP, C-ESMPs, and followed by contractors. These measures will be extended to any associated facilities as defined under ESS1 to the extent that ANE, IP has control or influence over them.</p>	Yes
<p>ESS9: Financial Intermediaries</p> <p>ESS9 is not relevant/ applicable to this project since there is no Financial Intermediary involved in CRRNP.</p>	No
<p>ESS10: Stakeholder Engagement and Information Disclosure</p> <p>The Project has undertaken and will continue to undertake consultations throughout project preparation and implementation with a range of stakeholders including local communities, private businesses, government departments, communities including IDPs and host communities in project area. A stakeholder consultation strategy has been developed to ensure that all relevant groups including marginalized people have opportunity to provide feedback on project design, including consultations with communities to ensure safe connectivity during civil works and to design communication mechanisms to inform the public about such arrangements. A participatory, inclusive, and culturally appropriate approach will be ensured during the project life cycle. A Stakeholder Engagement Plan (SEP) for CRRNP has been prepared and includes details of types, frequency and approach to consultations, information sharing and GRM and Citizen Engagement related procedures. During the life cycle of the project, it will be necessary to respond in a timely manner to the questions and complaints of the parties affected by the project related to the environmental and social performance of the project. The GRM developed as part of the ESMF includes specific requirements for the receipt, treatment and ethical and confidential resolution of grievances received by the project. The SEP will be updated regularly during implementation.</p>	Yes

World Bank Group Environmental Health and Safety Guidelines

General EHSGs

General EHS Guidelines are applicable to the CRRNP, as they include workplace safety, noise, air quality, and wastewater quality guidelines. They also include recommendations that shall be considered during construction activities and subproject operations in various fields such as wastewater management in workers' camps, hazardous material and waste management, occupational health and safety, measures to safeguard community health and safety, traffic safety, disease prevention, and specific measures for construction activities. These guidelines shall guide the development of Site-specific ESMPs.

For effective management of environmental, health, and safety (EHS) issues for subprojects, considerations shall be made to:

- Identification of EHS project hazards and associated risks as early as possible.
- Involve EHS professionals, who have the experience and competent.
- Prepare workers and nearby communities to respond to accidents.

Industry specific EHSGs for Toll Roads and EHSGs for Extraction of Construction Materials

The following Industry Specific EHSGs will apply to the proposed subprojects: (i) WB EHSG for Toll roads (given the various road and bridge works and even though not toll roads), (ii) WB EHSG for Construction Materials Extraction (as road and bridge subprojects will need such materials).

EHS Guidelines for toll roads have many principles that shall be applied to the road subprojects such as avoidance of critical terrestrial and aquatic habitats by proper alignment of the roads, avoidance of construction activities during breeding seasons and other sensitive seasons, minimizing clearance and destruction of riparian vegetation and or native species and habitats' enhancement shall be done. While during operation, regular mowing of vegetation, planting of native species and removal of invasive plant species using biological and mechanical control of vegetations instead of chemical shall be done.

WB-Good Practice Note on Road Safety

During implementation of roads and bridges subprojects, ANE,IP will identify, evaluate and monitor the potential traffic and road safety risks to workers, affected communities and road users throughout the project life-cycle and, where appropriate, will develop measures and plans to address them. ANE,IP will incorporate technically and financially feasible road safety measures into the subprojects' designs to prevent and mitigate potential road safety risks to road users and affected communities". ANE,IP will undertake a road safety assessment for each phase of the CRRNP, and will monitor incidents and accidents, and prepare regular reports of such monitoring. ANE,IP will use the reports to identify negative safety issues and will establish and implement measures to resolve them.

Use of Security Forces: Assessing and Managing Risks and Impacts, IFC 2017

Security related risks are among the vital elements in development of transport infrastructures around the development projects. The security risk can be related to human life, materials around the projects. CRRNP will work with security personnel in the northern region of Mozambique (especially Cabo Delgado) to protect their employees, facilities, assets, and operations mainly relying on deployment of public security forces. However, these security forces may represent risks to the local

communities which need to be prevented. Accordingly, a Security Risk Assessment has been undertaken and an existing Security Management Plan updated for use by CRRNP.

3.5 Key Gaps between World Bank E&S Standards and the Mozambique National E&S Framework

Table 3-3: Comparison between Mozambican legislation and World Bank E&S Standards (Adopted & customized from SRSEI ESMF, ANE 2022)

World Bank ESS provisions	Mozambican Legislation	Gaps Identified	Mitigation Measures
ESS 1: Assessment and Management of Environmental & Social Risks and Impacts	EIA required by Environment Law Nº 20/97 of October 1st, and Decree Nº 54/2015. The Regulation for the EIA process classifies the projects into 4 Categories: A full EIA, A+ category subject to review by professional assessors) is also required for Category A. A Simplified EIA is required for category B and category C only a best practices guideline.	EIA required by Environment Law Nº 20/97 of October 7, and Decree Nº 54/2015 do not indicate the need to prepare ESMF for projects whose exact locations are not known. Only EIA process is discussed. Categorization does not follow same criteria. Under the ESF: High, Substantial, Moderate and Low categories are used instead.	Despite minor differences there are no conflicts between the two sets of legislation. The Mozambican legislation does not have any instruments above the project. The instruments are only prepared for the implementation of the project that the site is known. Both systems have to be followed since they materially meet the same objective of requiring site specific assessment and mitigation measures proposed to inform the engineering designs before commencement of any civil works.
ESS2: Labor and Working Conditions	The Labor Law (23/2007) and Labor inspection (Decree nº 45/2009) mention the labor working conditions.	The national legislation does not mention the need to develop Labor Management Procedures including the requirement for workers' Grievance Redress Mechanism to be established as early as	CRRN Project has followed ESS2 and developed Labor Management Procedures with relevant provisions, including GRM and OHS Emergency

		possible in the project development phase.	Preparedness and Response to bridge the gaps.
ESS 3: Pollution Prevention and Resource Efficiency	Environmental Law (Law No. 20/97), Regulation for Environmental Standards and Effluent Emission (Decree No.67/2010), Pollution (Law No. 20/97), Regulation on urban solid waste management (Decree No. 94/2014), Hazardous Waste Management (Decree No. 83/2014) & NM339 Mozambican Standard are some laws and standard enacted to prevent environmental pollution from solid and liquid wastes, greenhouse gases and hazardous/toxic chemicals.	The national legislation mostly focuses on pollution prevention and less on aspects of resource efficiency.	CRRN Project will follow provisions of ESS3 on resource efficiency including the project screening its activities for cumulative impacts can be assessed.
ESS 4: Community Health and Safety	The Labor Law (23/2007); Law No. 4/2007 of February 7; Protection of Workers with HIV/AIDS (Law nº 5/2002); and Labor relations (Law Nº 23 /2007) are national laws that promote safety, hygiene, health of workers and welfare of relatives of an employee when dead.	However, these laws do not focus much on community health and safety but that of workers	This gap has been addressed through the implementation of ESS4 which addresses potential risks and impacts on communities that may be affected by project activities, including training them on GBV/SEA/SH, Road Safety and communicable diseases (HIV, STIs).
ESS 5: Land acquisition, restrictions on land use and involuntary resettlement	Land use rights (Law No. 19/1997); Decree 31/2012; Technical Guideline of Planning and Implementation Process of Resettlement Plans (Ministerial Diploma No. 156/2014) & Guidelines for the Expropriation (Ministerial Diploma No. 181/2010), these Mozambican legislations regulate the condition and the	There is no provision regarding the mitigation of resettlement in national legislation and where displacement is unavoidable, there is no room for development of a resettlement action plan. In addition, the national legislation does not make any provision for	These gaps will be addressed by application of ESS5 provisions and standards in project implementation.

	compensation mechanisms that govern the land expropriation or acquisition for public and economic projects.	consultation regarding resettlement sites.	
ESS 6: Biodiversity conservation and sustainable management of living resources	<p>Biodiversity protection (Law No. 20/97); Forest and wildlife protection (Law No. 10/99); & Decree No. 12/2002 approves the regulation of Law 10/99 focus on protection, conservation, use, production of flora and fauna resources, and conservation areas, including forest and wildlife.</p> <p>Conservation Law No. 5/2017, Article 11 states that a public or private entity exploiting natural resources in a conservation area or its buffer zone must contribute financially to the protection of biodiversity in the conservation area in question, and compensate for impacts to ensure there is no net loss of biodiversity, Decree 89/2017, Articles 124 and 125 apply to compensation related to conservation and requirements for no net biodiversity loss.</p>	There is no significant Gap between National and WB requirements.	CRRN Project will adopt the ESS6 principles, procedures and guidelines to ensure any impacts inflicted on biodiversity are compensated for to offset losses. It should follow the mitigation hierarchy: avoid, minimize, mitigate and offset.
ESS 8: Cultural heritage	Cultural Heritage (Law No. 10/88) & The National Heritage Protection Law (Law 10/88 of December 1988) focus on protection of material and non-material (antiques historical and cultural heritage) assets of the Mozambican cultural heritage.	The only gap that exists between the two legislations is that the national legislation does not focus on preparation of a chance finds procedure as part of the assessment instrument and does not	CRRN Project will follow provisions of ESS8 on preparation of a change finds procedures and ESMF as part of the tools for assessment of cultural heritage materials.

		focus on preparation of ESMF a part of the assessment tool.	
ESS 10: Stakeholder Engagement and information Disclosure	Articles 13 (No. 3) and 24 (No 1) of the Land Law; Article 25 (No. 1) of the Land Law Regulations & Article 27 (Nos. 2 and 3); and the Land Legislation Supplement (1998) ¹ in Article 50, 51, 52, and 53 focuses on stakeholder engagement on development projects that have risks and impacts on project affected persons and also on other interested parties.	The only gap that exists between the two legal frameworks is lack of GRM in national legislation useful to address grievances that may arise.	A GRM for this Project has been developed as part of the SEP and will be adopted for this Project.

4.1 Overview

Country Context

The country is divided into 11 provinces, including the capital city Maputo which has provincial status. With a population of approximately 28 million (INE, 2017), of which 68% live in rural areas and 60% live along the coastline, livelihoods in Mozambique depend to a large extent on natural resources, such as rain-fed agriculture and fishing. The population in Mozambique grows at an average rate of 2.6%/year. Around 54% of women in Mozambique have reported facing physical or sexual violence (UNIFEM) and violence against children, abuse, exploitation, and trafficking as well as child labor are a serious risk in the country.

Mozambique's economy grew steadily up to 2015, averaging 7.3 percent. From 2016 up to 2020 the economic activity decelerated sharply and in 2020, gross domestic product (GDP) declined by 1.2 percent, the first economic contraction in three decades. The economy has now shown signs of recovery, with growth estimated to have reached 2.2 percent in 2021, a combined outcome of agricultural growth, relatively strong recovery in services. The recovery of the economy still has low impact on the reduction of poverty for the rural people as is driven by capital-intensive and import-dependent sectors, while low-skilled jobs in the agriculture sector continued to dominate employment. As a result, the poorest people, living mainly in rural areas of the central and northern provinces, have benefited less from economic growth than the overall population. In this environment, agriculture-still the mainstay of Mozambique's economy-is critical for overall poverty reduction. However, agricultural productivity remains low and constrained by many factors, including limited access to transport infrastructure and services in rural areas. Agriculture employs about 80 percent of the total workforce and generates about 30 percent of gross domestic product (GDP).

In addition to the poverty and poor accessibility to rural areas, Mozambique is highly exposed to extreme rainfall and flooding that may become even more frequent because of global climate change. Catastrophic flooding occurs almost annually during the rainy season and is largely influenced by La Niña and the Intertropical Convergence Zone. During the past 7 years, the country registered several cyclones namely Kenneth, Chalane, Eloise, Gombe, Ana, Dumako, Idai and Freddy. In 2015 a devastating flood affected 326,000 people, killed 140, and caused damages estimated at US\$371 million in parts of Zambezia, Nampula, and Niassa Province, another northern province. In 2013, a flood affecting the Limpopo lower basin killed 113 people, displaced more than 200,000, and ruined nearly 89,000 ha of cultivated land. Other major floods (in 2000 and 2007) and cyclones (in 2008, 2012, and 2017) caused fatalities and severe damage in different parts of the country.

In Cabo Delgado province, the cyclones, heavy rains and floods destroyed various infrastructures including roads and bridges, hitting an already vulnerable population, which was in many areas affected by terrorism violence and poverty. In the districts of Quissanga, Mueda, Muidumbe, Macomia, Metuge, Mecufi and Ibo (the most affected) entire villages were destroyed with communities in need of humanitarian assistance which, despite the improvements in terms of security caused by terrorism, the poor condition of roads and bridges has created difficulties for the transportation of the human aid for the population. The delays in rebuilding of road infrastructures caused by insufficient financial resources, had increased the degradation of the road network and

bridges, especially steel bridges, causing partial isolation of the Mueda, Quissanga, Muidumbe, Macomia, Mecufi and Metuge districts, affecting around 378,762 people. As the security situation has improved, there is a need to urgently reconstruct the affected road network to ensure the implementation of all reconstruction projects in Cabo Delgado province and provide the minimum conditions for the movement of goods and people.

Mozambique is covered by a diversity of ecosystems and species of global importance for biodiversity conservation and is part of the 5 main phytogeographical zones of Southern Africa, namely: (i) Regional Mosaic Maputaland-Tongoland; (ii) Afromonantane Endemism Center; (iii) Zambezi Regional Centre of Endemism; (iv) Swahilian Regional Centre of Endemism (Regional Mosaic Zanzibar Inhambane); and (v) Regional Swahilian-Maputaland Transition Zone (Van Wyk and Smith, 2001). In the province of Cabo Delgado the following road segments to be rehabilitated are located within the Quirimbas National Park: the R762 (13 km Mahate-Quissanga), and N380 (25 km Muagamula-Xitaxi).

Mozambique's strategic position along the eastern coast of Southern Africa provides access to the sea for several landlocked countries. Of six bordering countries, four are landlocked—Malawi, Swaziland, Zambia, and Zimbabwe—with South Africa and Tanzania the remaining two. This position on Africa's southeastern Indian Ocean shores offers great opportunity to develop logistics corridors and foster growth and trade between its African neighbours and the rest of the world through the ports of Maputo, Beira, Quelimane and Nacala.

Although roads are the main transport mode in Mozambique, accounting for half of freight traffic and 98 percent of passenger traffic, road density is low, and the network has few redundancies; and loss of an individual road link to flood often leaves areas without a viable road connection to markets or essential services. The classified road network—primary, secondary, tertiary, and vicinal—runs 30,464 kilometers (km), 27 percent of it paved. This works out to a classified road density of 2.9 km per 100 km² of land, which is relatively low compared to neighbouring countries such as Kenya (10.8 km per 100 km²) and Tanzania (5.5 km per 100 km²). The extent of the unclassified road network, meanwhile, is uncertain, with estimates ranging from 30,000 km to 45,000 km. The national transport network primarily connects natural resources, agricultural clusters, and landlocked countries in the west to Indian Ocean ports in the east—Maputo, Beira, Nacala, and Quelimane—through six east-west corridors. Connectivity between the southern and northern provinces is particularly low, with National Highway N1, which extends north to south, providing the only link connecting the six east-west corridors.

The road network, especially the north-south link, is prone to disruption by river floods and cyclones, but uncertainty about the future and limited resources make it difficult to plan robust mitigating measures. With 104 identified river basins, including nine cross-border, the country is the second-most exposed to floods and cyclones in Africa. Most of the rivers flow from west to east, draining the water of the central African plateau into the Indian Ocean. Flood-related disruptions of the road network have significant socioeconomic consequences, partly because the existing road network has few alternative routes in the event of disruptions. To overcome this constrains, there is a need provide reliable access through effective planning for potential impacts of extreme events and building resilience into the road network.

Meanwhile, Mozambique has among the highest road fatality rates in the world, ranking 165 out of 173 countries/regions. Considering strong growth in vehicle registrations, which are increasing at more than 10 percent per year, growth in road accident numbers will likely continue. The main risk factors for injuries include reckless driving, drunken driving, poor road surfaces, inadequate signage, lack of protection for pedestrians, poor speed regulation, inadequate traffic law enforcement, and weak governance. This project is also designed to address this issue and contribute for improvement of the road safety in the road transport.

Employment is majorly male dominated in the transport sector, which limits sector diversity. Labor force participation in Mozambique is high and similar for both sexes, but women are employed in less remunerative sectors such as agriculture. The female share of graduates from science, technology, engineering, and mathematics (STEM) programs in tertiary education has been growing in recent years (21.4 percent in 2015; 29.3 percent in 2020), although there is still a gap between the number of women and men employed in the transport sector, where only 6.4 percent of employees are women. Barriers for women are related to entry and recruitment (lack of information, absence of gender-sensitive processes in recruitment, limited aspirations, stereotypes of STEM careers been only for men), retention (lack of benefits and flexible schedules, no mechanisms to respond to sexual harassment (SH)), and promotion (gender gaps in access to training and mentoring programs). In terms of lower-skilled jobs, only 3 percent of women are employed in construction. Women face structural barriers to participation in road works, including pervasive gender norms that support gender stereotypes and lack of information on job opportunities.

The poor condition of roads also disproportionately affects women; improved roads and access to services can have substantial benefits for women. According to the Mozambique Systematic Country Diagnostic (with information from the Demographic and Health Survey), 48.7 percent of female respondents aged 15 to 19 and 50.9 percent of those aged 20 to 34 indicated distance as the main factor limiting their access to health facilities. Evidence from other countries shows that access to good-quality roads can improve women's health outcomes.

4.2 Classification of Mozambique as a Fragility, Conflict and Violence (FCV) Country

Mozambique has recently been classified as an FCV country under Medium-Intensity Conflict due to the security situation in several regions of the country. A new peace accord was reached in August 2019 and has been violated several times by a Renamo breakaway military faction known as Military "Junta" operating between the central provinces of Manica and Sofala. Meanwhile, there is another so-called Islamic insurgency in parts of the gas-rich province of Cabo-Delgado. The indiscriminate killing of civilians perpetrated by the insurgents has now spread to other districts and towns in the province, including Mocímboa da Praia, Palma, Macomia, Quissanga, Ibo, Meluco and Nangade. Since October 2017 when first insurgent attacks started, there has been an escalation of conflict and violence. Recent estimates show that the conflict has killed more than 1,000 people and led to some 700,000 people in need of humanitarian assistance.

The deployment of Government Armed Forces to protect Cabo Delgado civilians and their properties and goods and to respond to the attacks that have been perpetrated by insurgent armed groups, has brought increase scrutiny from national and international organizations of human rights which have expressed concerns over the violation of human rights, use of excessive and unjustified force, by the Defense and Security Forces.

To assess such risks, the CRRN project has undertaken a Security Risk Assessment and developed a Management Plan that provides measures to ensure that risk mitigation measures are in place for workers and local communities.

4.3 Cabo Delgado

Cabo Delgado province is located in the north-east corner of Mozambique. The province borders the neighboring country of Tanzania, as well as the provinces of Nampula and Niassa. The province is subdivided into 16 districts (Ancuabe, Balama, Chiúre, Ibo, Macomia, Mecúfi, Meluco, Mocímboa da Praia, Montepuez, Mueda, Muidumbe, Namuno, Nangade, Palma, Pemba-Metuge, Quissanga), and seven Municipalities (Balama, Ibo, Chiure, Mueda, Mocimboa da Praia, Montepuez and Pemba).

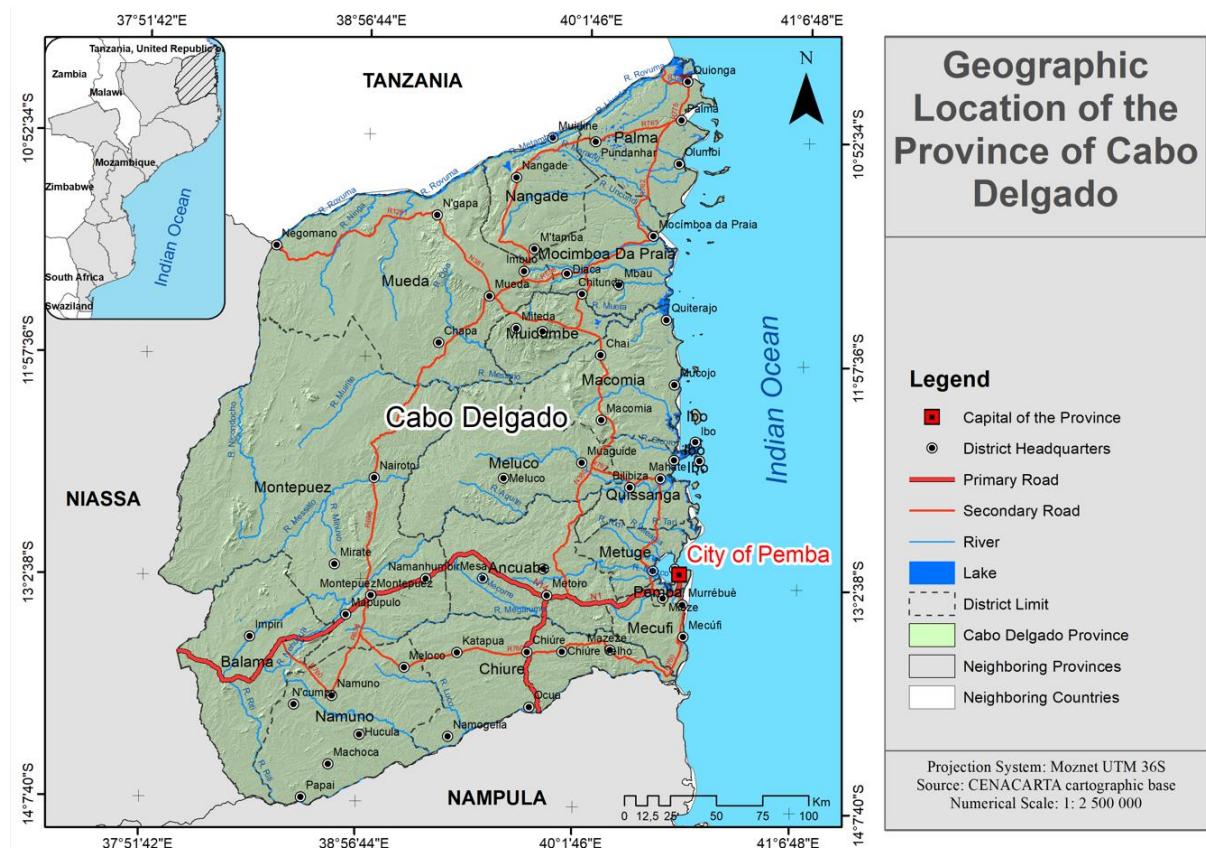


Figure 4-1a: Geographic location of Cabo Delgado province

4.3.1 Topography

The topography of Cabo Delgado is formed by several mountains and hills towards the interior of the province, while in the coastal zone there are coastal plains that are fertile and suitable for agriculture. Therefore, the province has several hilly areas, and the terrain is undulated. The slopes are between 1 and 5 %.

4.3.2 Soils

Cabo Delgado has poorly drained soils and are often difficult for agriculture. There are very heavy soils along the coast, gray and black with muddy and poorly drained. Sandy soils are moderately washed, predominantly yellow to gray-brown, or with internal sand (feral sandy soils) or sandy coastal dunes (Haplic sandy soils). There are also soils of the coastal dune strip, with texture of sandy to clayey sandy

and showing yellowish colors (iron sands). Hydromorphic sandy soils also occur in depressions and lowlands, alternating with higher lands (ANE, 2020). These kinds of soil are probably not suitable for road construction and even improvement. The soil drainage is poor and may lead to accumulation of water on the surface of the road, which can compromise the road safety of drivers and passengers.

4.3.3 Climate and Temperature

The climate of the area is sub-humid tropical climate characterized by both wet and dry season. The dry and cold season is from May to November, while the hot and humid season is from December to April. The average temperature in Cabo Delgado ranges from 27 °C in January to 23 °C in July. Average annual temperatures range 18°C in July, which is the coldest month, to an average of around 27.8°C in December. El Niño leads to much enhanced rainfall during December to February, and little to no impact during end February to March. In Cabo Delgado including other parts on the north, the province experiences extreme weather events such as floods, cyclones, and drought. Intense Tropical Cyclone Kenneth was the strongest tropical cyclone to make landfall in Mozambique in April 2019, since modern records began causing widespread damage, power outages, felling trees which caused additional damage. A total of 45 people were killed, 4 ships sank off the coast of Palma and 2,500 homes were destroyed with multiple schools and hospitals also sustaining damage. It is reported that the intensity of heavy rain events is expected to increase by 10% (2010-2100), while their frequency is projected to increase by 6%. This projection is likely to cause floods and damage to life and property more frequently especially during the rainy season in the province, including in the targeted sections of the infrastructure developments (Climate profile, 2018).

4.3.4 Rainfall

Cabo Delgado normally receives rainfall, which is around 600–900 mm per year in most parts of the province; in some cases, it reaches up to 1,110–1,500 mm especially in the southern part bordering Nampula province (National Meteorology Institute, 2007). Evapo-transpiration averages 950 to 1400 mm (Métier, 2005) (ANE, 2020).

4.3.5 Natural habitats/ ecosystems and biodiversity

The natural forests in the province are largely tropical humid miombo and savannah woodlands. However, it is reported that between 2002 and 2020, the rate of deforestation was at about 2.2% while the rate of forest fires was estimated to be at 0.85% in the province. The Key Biodiversity Area in Cabo Delgado Province is the Quirimbas National Park (QNP) encompassing the southern part of the Quirimbas Islands, as well as a significant mainland area. The park protects 913,000 hectares of coastal forest, mangroves and coral reefs. There are populations of African elephants, lions, leopards, (endangered species), crocodiles and even wild dog in QNP. The segments of R762 (13 km Mahate-Quissanga), and N380 (25 km Muagamula-Xitaxi) are within the QNP, and these roads will be rehabilitated as part of the proposed project. As these roads (specific segments) are within the Park, it is expected that some small fauna species occur in natural habitats that are close to the N380 and N762 road corridor. Habitat fragmentation, agricultural expansion and hunting have reduced the wildlife population in general. Habitats include mountains, forests, woodland, savannah, mangroves, beaches, coral reefs and sea grass beds (ANE, 2020). A map below shows the conservation areas in the province of Cabo Delgado, and the districts of Quissanga and Macomia are covered by the QNP and two of the road sections to be intervened in Cabo Delgado are within these districts.

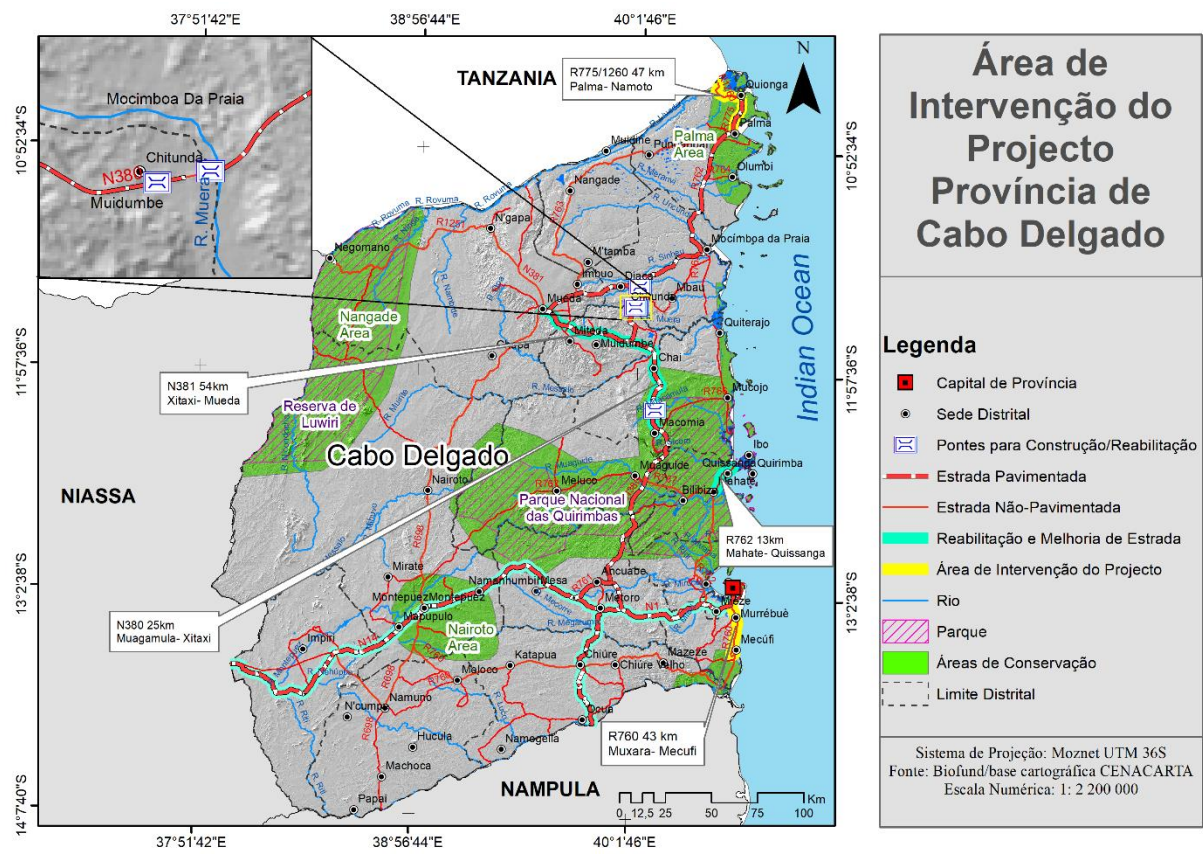


Figure 4-2: National conservation areas Cabo Delgado

4.3.6 Population

The population of Cabo Delgado province has been estimated at of 2,333,278 according to the 2017 census. INE estimates for 2023 indicates a total of 2,744,872 habitants, being 49% (1,336,707) men and 51% (1,408,165) women. Montepuez is the most populated district with 322,719 in 2022. Cabo Delgado’s population density is at 32 people per km2, less concentrated in comparison to Maputo Province whose population density is estimated at 96.20 persons per square kilometer (ANE, 2019).

As of April 2021, an estimated 662,828 IDPs were identified in Cabo Delgado (Displacement Tracking Matrix (DTM), IOM).

4.3.7 Education

The illiteracy rates are approximately 53.5% but varies from rural to the urban areas. It also varies between sex, females have the highest illiteracy rate, which is at 83.0%, and male at 46.2% in the province. The province has a total of 1446 public schools from primary to secondary education, and 33 public and private higher education institutions (INE, 2022).

4.3.8 Health

The province has poor sanitation facilities as approximately 69.3% of the population has no toilets and only 30.4% have access to potable water (INE, 2020). In addition, only 59.8% of the total population has access to health facilities. Malaria, febrile syndrome, and diarrhea remained the major diseases across Cabo Delgado province, with close to 785,500 malaria cases, 168,200 febrile syndrome cases, and 44,000 diarrhea cases reported since the beginning of 2021.10 (UNOCHA, December 2021). The

Statistical Yearbook (INE, 2022) indicates that the province has a total of 136 health units, with 1922 beds (maternity and others).

4.3.9 Culture

There is a multiplicity of ethnicities and vernacular languages spoken in Cabo Delgado. The region is an ethnic stronghold of the Makonde tribe, with the Makua and Mwani as leading ethnic minorities. The social and family structure of the targeted province is mostly matrilineal (GoM, 2020).

4.3.10 Civil Conflicts

The main insurgent faction actively operating in Cabo Delgado is the Ansar al-Sunna, a native extremist faction with tenuous international connections. From mid-2018, the Islamic State of Iraq and the Levant (ISIL) has allegedly become active in northern Mozambique as well and claimed its first attack against Mozambican security forces in June 2019. In addition, bandits have exploited the rebellion to carry out raids. As of 2020, the insurgency intensified, as in the first half of 2020 there were nearly as many attacks carried out as in the whole of 2019.

Ansar al-Sunna ("Supporters of the Tradition") is similar to the name of an Iraqi Sunni insurgent group that fought against U.S. troops between 2003 and 2007. Locals call them "al-Shabaab" but they are a separate organization from the Somali al-Shabaab. The militants are known to speak Portuguese, the official language of Mozambique, Kimwane, the local language, and Swahili, the "lingua franca" language spoken in the Great Lakes region. Reports also state that members are mostly Mozambicans from Mocimboa da Praia, Palma, and Macomia districts, but also include foreign nationals from Tanzania and Somalia.

This insurgent faction may pose serious threat to workers and also to the local communities in the area during the implementation of the Project activities. In this respect, there is a need to undertake a Security Risk Assessment in the area and develop a separate Security Risk Framework to manage these risks. The security risk assessment and preparation of the framework will be carried at a later stage but prior to the commencement of any work in the area.

4.4 Nampula

Nampula Province is located in northeastern Mozambique. It is bordered on the north by Cabo Delgado Province at the Lúrio River, to the south with the Province of Zambezia and to the west, the Province of Niassa.

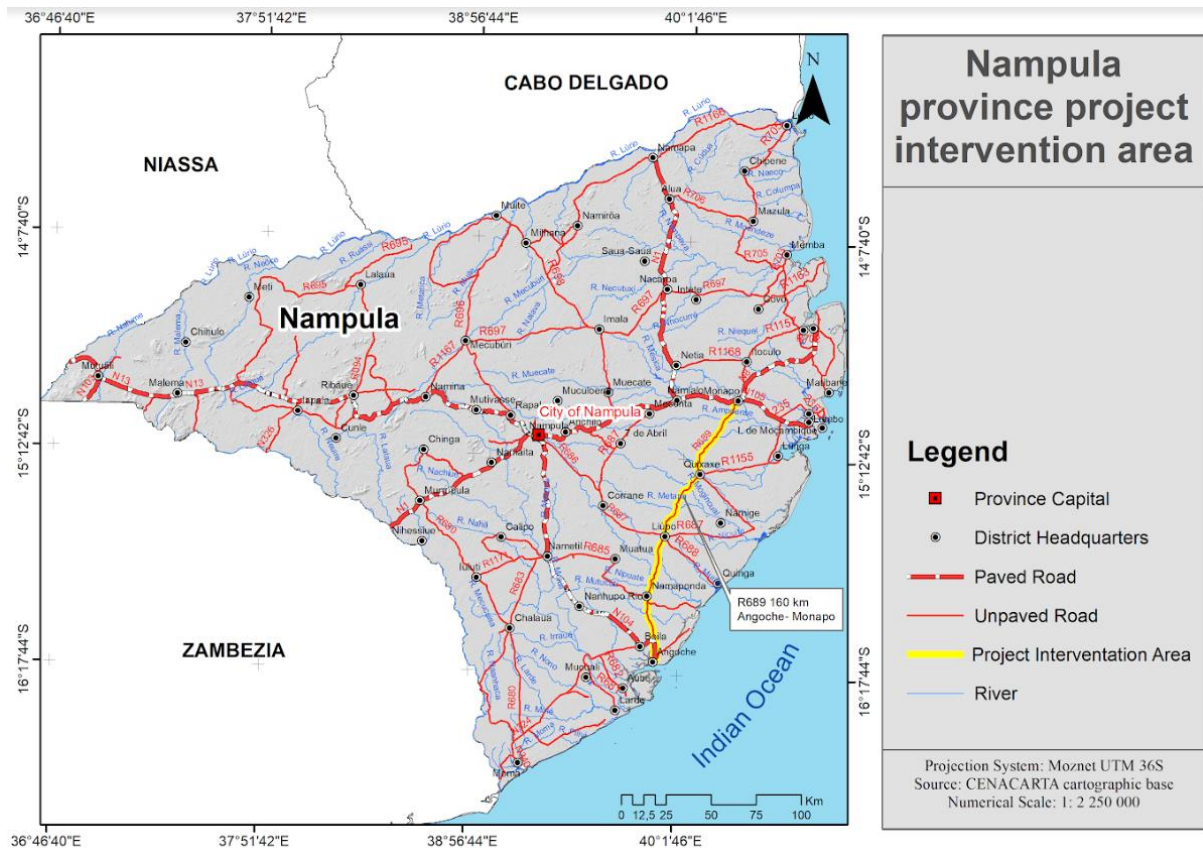


Figure 4-3: Geographic location of Nampula Province

4.4.1 Topography

The city of Nampula, which lies in the heart of the province, is surrounded by several hills and mountains. Mountains in the province include Mount Inago (1804m), Mount Ribaué, Mount Panda and Mount Nairucu. The rest of the province has flat and undulated terrains. The slopes are between 1 and 3 %. (Ulgade, M., Efrain, M & Peraza, S, 2008 (Climate Profile, 2018).

4.4.2 Soil

According to the Mozambican Geomorphology map, the soil of Nampula province consists of bedrock alluvial terraces. The most dominant soils of Nampula province include dark alfisols, red and very red alfisols, mollisols, ustropts and vertisols. Mollisols have high content of organic matter and are suitable for agriculture. However, these soils are also prone to soil erosion which should be considered when materials are identified for road construction and mitigation measures implemented to reduce these risks. (Ulgade, M., Efrain, M & Peraza, S, (2008; Climate Profile, 2018)

4.4.3 Climate and Temperature

Nampula is located in a region with sub- humid tropical climate with a dry season. The dry and cold season is from May to November, while the hot and humid season is from December to April. Average annual temperatures range between 23.5°C in July which is the coldest month, to an average of 27.6°C in December. Nampula is influenced by the monsoon winds, with north winds prevailing from October to February, and south winds from March to September. The province is more frequently hit by tropical cyclones that cause several flash floods that tend to damage road and rail networks in districts

of the province. In 2019, Nampula and Nacala experienced heavy Tropical Cyclone Kenneth which affected many parts of the province and caused floods and damage to property. (ANE, 2020).

4.4.4 Rainfall

Nampula normally receives around 656–901 mm per year of rainfall in most parts of the province. In some cases, it reaches up to 1,160–1,390 mm especially in the southern tips of Malema and Ribaué (National Meteorology Institute, 2007). Evapo-transpiration averages 1,000 to 1,400 mm (Métier, 2005).

4.4.5 Natural habitats/ ecosystems and biodiversity

The conservation areas in Nampula are shown in the figure 4-4 below and are situated far from the R689 road section (160 km Angoche – Monapo) to be rehabilitated under this proposed Project. It is estimated that deforestation rate currently is at about 0.34% while rate of forest fires is at about 0.1% compared to the last ten years, which was at 0.7%. In this province, Ribaué-Mphalwe is the only Key Biodiversity Area that exists. This important area was established after running IBAT into a KBA World Database (<https://www.keybiodiversityareas.org/site/factsheet/49167>).

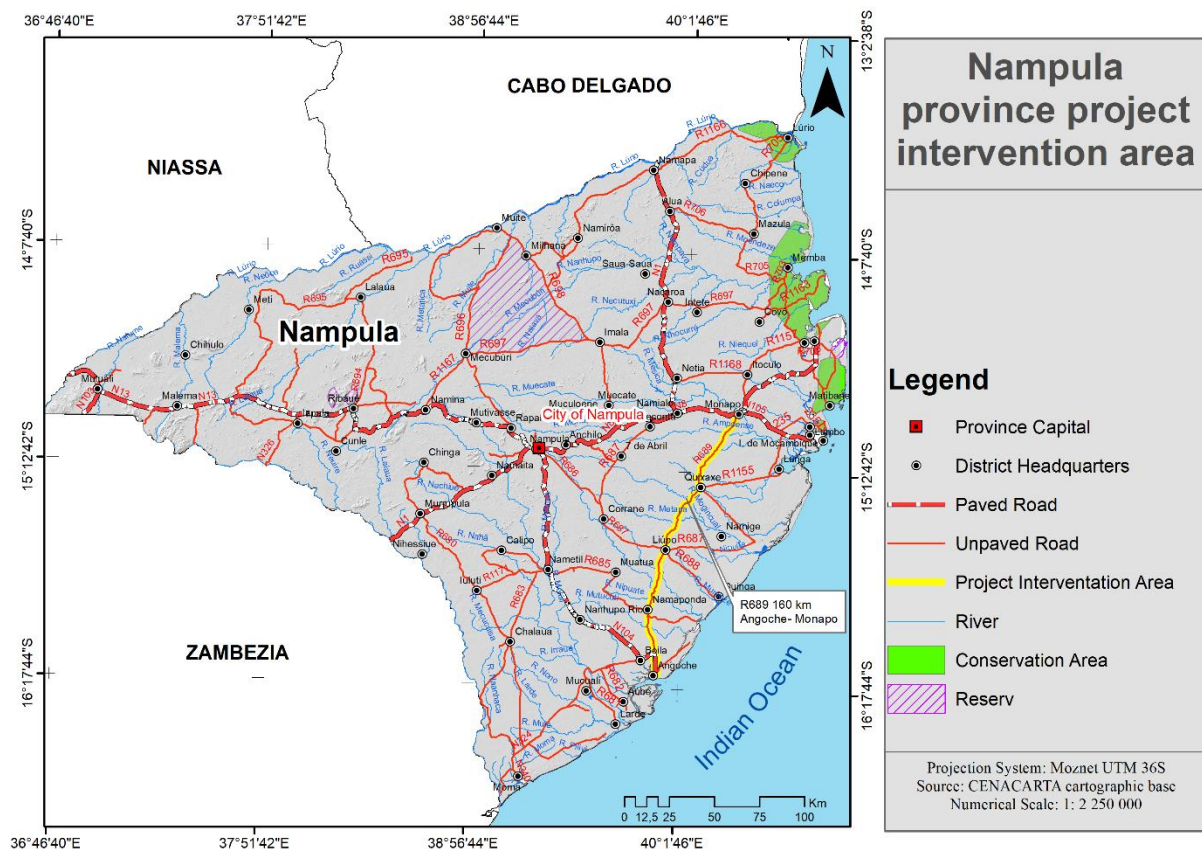


Figure 4-4: National conservation areas in Nampula Province

4.4.6 Population

The population of Nampula has been estimated at 6,649,881 according to the estimated from INE for 2023 based on the census of 2017, making Nampula the most populous province in Mozambique with over 21% of the total population of the country. 49% (3,241,895) of the population are men and 51% (3,407,986) are women. The city of Nampula is the most populated in the province with 957,596

estimated data for 2022. In terms of surface area, Nampula covers 81,606 km² of the surface area of Mozambique (799,380km²). Nampula's population density is of 80 people per km², so even given the relatively very high population and density, Nampula is relatively undisturbed. (ANE, 2020).

As of April 2021, an estimated 66,913 IDPs were identified in Nampula¹¹ (Displacement Tracking Matrix (DTM), IOM).

4.4.7 Education

The illiteracy rates are approximately 56% but varies from rural to the urban area. It also varies between sex, females have the highest illiteracy rate, which is at 71.2%, and males at 40.5% in the province. The province has a total of 2,392 public primary and secondary schools as per data of 2022 Statistics Yearbook, and total of 11 universities both private and public (INE, 2022).

4.4.8 Health

Approximately 46% of the population has no toilets and only 31.8% have access to potable water (ANE, 2019). This is attributed to long distances to get to the nearest health centre but also due to high level of illiteracy rate in the province. Nampula has a total of 245 health unities from the national health services, with a total of 4,151 bed for maternity and others. The majority number of health units are concentrated in the city of Nampula with 25, followed by the district of Angoche with 19 health unities, according to data from the Statistics Yearbook for 2022 (INE, 2022).

4.4.9 Culture

Nampula is almost entirely the Makua with eMakhuwa as the main language spoken. The social and family structure of the targeted province is mostly matrilineal (GoM, 2020).

4.5 Niassa

The province of Niassa is located in the northern region of Mozambique, and has a border, to the north with Tanzania, to the south with the provinces of Nampula and Zambézia, with the province of Cabo Delgado to the east and to the west with Malawi, with which it also divides Lake Niassa, one of the African Great Lakes.

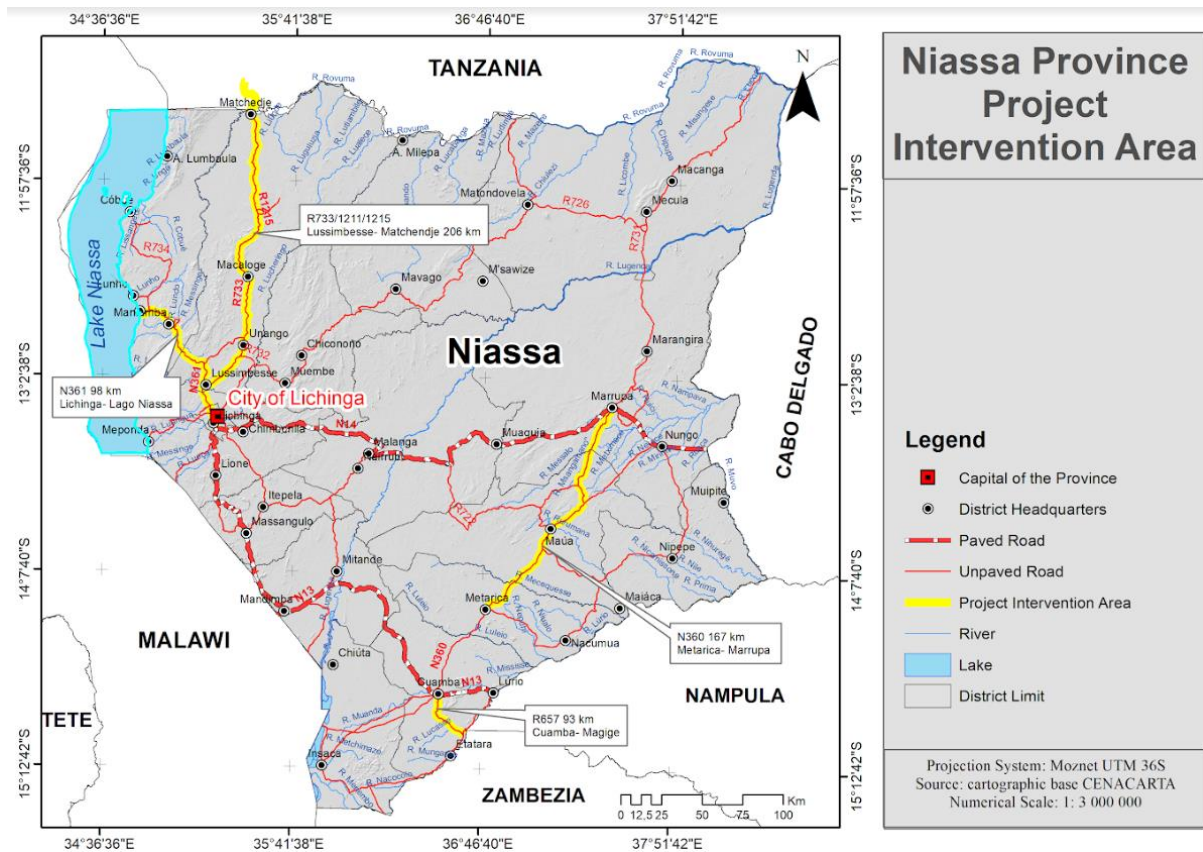


Figure 4-5: Geographic location of Niassa Province

4.5.1 Topography

Niassa has five different geotopographic strata. In the valleys of the main rivers, altitudes vary from 200 to 400m. The subplateau zone, the largest in the province's territory, has altitudes between 400 and 700m and gentle undulating relief. At altitudes above 700m, there are the medium plateaus (Metarica plateau, Alto Lunho, and the first platform of Alto Niassa), where the relief is undulating. At altitudes of up to 1300m, there are spots, such as the Lichinga Plateau, and in some cases, it reaches 1500m. In high areas, the surface consists predominantly of rocks. In valleys, plateaus, and steeper areas, it is characterized by alteration layers of varying thickness. In the lowest areas, the sedimentary layer (from the Quaternary) is thick and reveals the presence of isolated underground aquifers, with large water reserves.

4.5.2 Soil

The predominant soils in Niassa are characteristically of the Pre-Cambrian soil, with red soils standing out, differentiated on the basis of medium texture or clayey. The clayey soils group are deep and well drained, with the main limitation being the potential risk of erosion. The medium texture soils occur on steeply sloped tops and slopes, associated with orange-red soils, with variations in tone. In general, the soils of the Niassa Province are fertile for agricultural practice and forestry production, with around 12.3 million ha representing 1/3 of the arable land.

4.5.3 Climate and Temperature

Niassa's climate is characterized by two well-defined seasons throughout the year: a rainy season and a dry season. The rainy season runs from October to March and the dry season from April to September. The months of April and October are considered transitional for the rainy season respectively. In the dry season, the average temperature varies from 15°C to 25°C and in the rainy season, it rises to more than 25°C, rarely exceeding 30°C.

4.5.4 Rainfall

In the plateau area and along the shores of Lake Niassa, an average annual rainfall of 1,300 mm can occur, while in the more arid areas, in the south of Niassa near Cuamba, the average annual rainfall varies between 800 and 1000 mm.

4.5.5 Natural habitats/ ecosystems and biodiversity

Data from the last forest inventory carried out in 2006 reveal that Niassa has the largest forest area in the country, with around 9.4 million hectares, representing a forested area above the national average of around 77%. Niassa has an estimated potential of 2.4 million hectares for the establishment of forest plantations of fast-growing species.

The predominant type of vegetation in Niassa is Miombo, characterized by open forests, physiognomically diverse, not very dense and with species of low commercial value. Of the species that occur, the Messassa incarnada (*Julbernardia blobiflora*) and the Messassa (*Brachystegia spiciformis*), and Metongoro (*Uapaca kirkiana*) stand out.

The conservation areas in the province of Niassa is made up of i) Niassa National Reserve with an extension of 42,000 km²; ii) Lake Niassa Partial Reserve with a length of 150 km; iii) Official Coutadas of Nacumua and Nipepe; iv) Chipanje Chetu and Manda Wilderness community conservation areas; v) Moz Unlimited, MWA, and Montes Mosale game farms; vi) areas in the categorization phase (Nungo, Messalo and Lureco Basin). Lake Niassa is the 3rd largest in Africa and maintains a unique biodiversity with around 245 km long and 45 km wide, 700 to 1000 species of ornamental fish.

The Niassa National Reserve is approximately 1/3 of the Niassa Province and a part of the Cabo Delgado Province, covering eight districts, including the entire Mecula District and a large part of the Mavago District. It has a rich fauna, consisting essentially of elephant, ox-horse, lion, zebra, buffalo, wild pig and imbabala, pala-pala, chango, phacocero, inhacosso, kudu goats, gondonda, impala, reptiles, hippopotamus, spotted hyena, crocodiles, birds, fish etc.

Both Lake Niassa and Serra Mecula are considered important habitats for endemic or restricted-occupancy species, and equally habitats that support concentrations of migratory species, according to the IFC criteria described in the mapping of habitats in Mozambique carried out by CEAGRE in 2015.

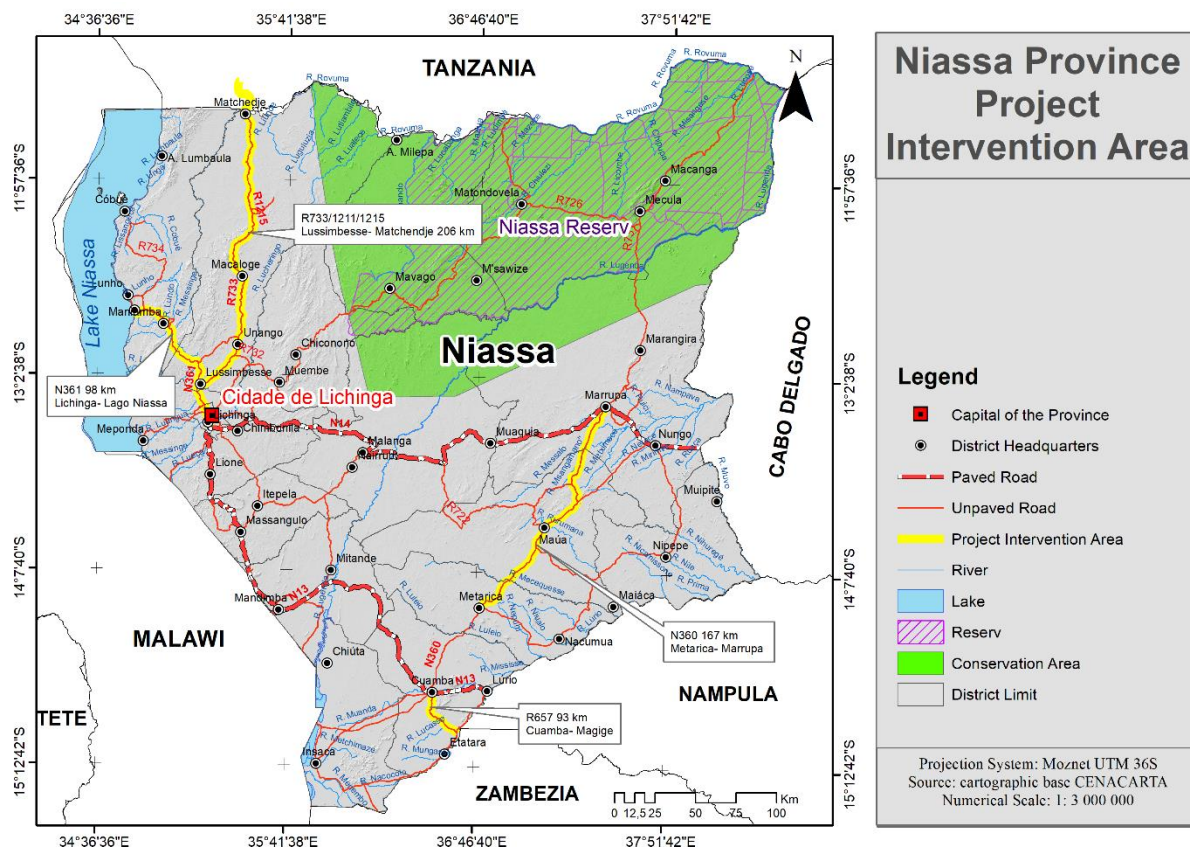


Figure 4-6: National conservation areas in Niassa Province

4.5.6 Population

The province of Niassa is the largest in the country with an area of 122,194 km². The province is divided into 16 districts, including Lichinga (Chimbonila) district. There are 5 municipalities, namely Cuamba, Lichinga, Mandimba, Marrupa and Metangula. The total population according to data from the 2022 statistical yearbook (INE, 2022) is 2,132,767 inhabitants, of which 1,036,736 (48.6%) are men, and 1,096,031 (51.4%) are women. The population density is 17.5 inhabitants/km².

4.5.7 Education

The province of Niassa had, in 2022, according to the statistical yearbook (INE, 2022), a total of 1831 primary and secondary public education schools, and 5 public and private higher education institutions.

4.5.8 Health

According to data from the statistical yearbook (INE, 2022) the province of Niassa has 206 health units of the National Health Service, and a total of 1381 beds in maternity and other services. The district of Cuamba is home to the majority of health units, a total of 27, followed by the city of Lichinga with 26 health units. However, the number of beds is concentrated in the city of Lichinga, with a total of 359, around 26% of the total in the province.

4.5.9 Culture

In the province of Niassa, the Islamic religion triples its representation in relation to national values, even though the Catholic religion maintains an identical proportion to the proportion of the national whole (just over a quarter of the population), with all other options emerging, at this provincial level, with substantially reduced and insignificant values. There are a total of 37 monuments and historical sites in the province, and 2 museums.

5 POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS, IMPACTS AND STANDARD MITIGATION MEASURES

5.1 Introduction

Construction, rehabilitation and maintenance of roads and bridges have often caused widespread adverse impacts on natural and human environments. Damage may include disruption or contamination of drainage systems, soil destabilization, habitat destruction and loss of fauna and flora and opening frontier areas containing pristine landscapes. Road development may also be a source of adverse impacts on the human environment, particularly the displacement and resettlement of affected families and businesses and health and safety. Roads and bridge works pose risks and impacts arising from the individual construction activities as well as operation of ancillary/ supporting facilities such as workers' camp/s, batching plants, access-roads, materials source sites such as quarries, gravel/ borrow pits, etc.

Typically, roads and bridges work involve the following components:

- Road surface (paved or graded).
- Road reserve ("hard shoulder").
- Crossings (e.g. bridges, culverts).
- Drainage and erosion control structures.
- Safety and security measures (e.g. barriers and fencing).
- Other elements (e.g. signage).

Ancillary facilities include the following:

- lay-bys or service areas.
- temporary construction facilities (e.g. workshops, laydown areas, working corridors outside the road reserve, workers' accommodation/camps, and borrow pits)
- security posts and toll stations.
- access roads within and between temporary facilities and the road being developed.
- landscaping features, etc.

Typically, roads and bridges construction work involve the following activities:

- Establishing temporary access to work and ancillary areas, demarcating clearance zones, establishing access control.
- For road upgrading, erection of temporary diversions where needed to manage existing traffic.
- Clearance and levelling of the corridor, and major earthworks where required (e.g. cuttings, embankments).
- Location and development of borrow pits (and possibly quarries), import of materials, e.g. gravel, clay, bitumen.
- Sourcing and establishing of a water supply from surface and/or groundwater.
- Improvement of existing drainage and introduction of new road drainage, including culverts if required.
- Surfacing and sealing of the carriageway, including use of bitumen mixing plants where the road is to be sealed.

- Water crossings, e.g. construction or upgrading of bridges and culverts, including concrete batching for structures.
- Establishment or improvement of safety arrangements e.g. modification of camber, barriers, improving sight lines.

Landscaping, as required.

- The equipment required will include heavy mobile plants (e.g. graders, bulldozers, excavators, rollers) and temporary fixed plant such as bitumen mixing plant, concrete batching plant and power generators.

During the construction phase, the following key activities will take place:

Monitoring of ESMP performance, Monitoring of compliance with loan covenants, and Monitoring of sub-contractor contract provisions.

During operation and maintenance any public road is likely to have a range of different vehicle types including heavy and light vehicles, as well as other forms of traffic such as bicycles, carts and pedestrians. All of these may contribute to direct and indirect impacts described in the impact Table below.

The road operation and maintenance phase the project will entail many of the activities described above for the construction phase, although in general they are likely to be smaller in scale and spatial extent.

Decommissioning and Closure Phase:

Where temporary roads are developed during construction they should be decommissioned and rehabilitated in accordance with a site-specific closure plan developed in consideration of international good practice. The closure process will include site clearance, removal of all equipment, and appropriate disposal of waste materials, soil ripping and re-grading where necessary.

5.2 Generic Potential Environmental and Social Risks and Impacts and Proposed Standard Mitigation Measures

5.2.1 Positive Environmental and Social Impacts

The CRRN project involves roads and bridges infrastructure interventions in selected regions, by supporting their upgrading and rehabilitation, playing a key role in the socio-economic activities of the areas. The proposed interventions will improve the roads transport connectivity to and from and within the regions. This will in turn promote socioeconomic activities like businesses, agriculture and tourism as well as creating employment opportunities while at the same time contributing to government revenues through taxes.

The proposed project is fully aligned with the Government of Mozambique goal of promoting economic and social development by (a) enhancing productivity and competitiveness through expanding road connectivity to all major productive zones and (b) reducing travel times and vehicle operating costs through rehabilitation and maintenance of road infrastructures. The project is intended to help the Government move toward balancing the three Road Sector pillars: conservation of road assets, improvement of the resilience of the road infrastructures, improvement of rural mobility, and improvement of road safety.

Employment is another major socio-economic benefit to the workers and project host community.

The road network, especially the north-south link, is prone to disruption by river floods and cyclones, but uncertainty about the future and limited resources make it difficult to plan robust mitigating measures. To overcome this constrains, the design of the proposed project will provide reliable access through effective planning for potential impacts of extreme events and building resilience into the road network.

5.2.2 Negative Environmental and Social Impacts and proposed Generic Mitigation Measures

The generic negative environmental and social impacts of the project are summarized in the Table below, including their generic mitigation measures.

Table 5-1: Generic negative E&S impacts and proposed Generic Mitigation Measures

Impacts	Proposed Generic Mitigation Measures
<p>Geology/Hydrogeology</p> <ul style="list-style-type: none"> • Interruption of hydrogeology and groundwater flows from excavation and ground clearance. 	<ul style="list-style-type: none"> • Detailed alignment to take account of local groundwater conditions, e.g. by avoiding areas with springs or where the water table is shallow. • Limit sealed or compacted areas as much as possible, to maintain natural recharge of the water table. • Sizing of culverts shall be done to ensure hydraulic transparency and take into account floods events. • Avoid removing material below the water table.
<ul style="list-style-type: none"> • Pollution of groundwater from discharges and accidental releases. 	<p>See Pollution of Soils and Water below</p>
<p>Soils, Run-off and Flooding</p> <ul style="list-style-type: none"> • Loss of soil / sediments and pollution of watercourses, and interruption of drainage patterns, as a result of ground clearance and earthworks. 	<ul style="list-style-type: none"> • Minimization of cleared areas and soil disturbance, with revegetation as soon as feasible, with native species. • No vehicle to be used outside designated areas. • Early installation and regular maintenance of drainage and diversion structures, silt traps, etc; drainage outlets to discharge into vegetated areas if possible; vegetation along watercourses and drainage lines to be retained if possible. • Avoidance of areas liable to flooding, slope instability, and water crossings where possible. • Retention of topsoil for restoration (including tilling and revegetation) as soon as practicable. • Restrictions on work and other activities around waterbodies (e.g. vehicle washing), and minimization measures around water crossings where this is not possible.

	<ul style="list-style-type: none"> Careful design: e.g. alignment, minimal diversion, timing of works (overall duration and seasonality).
<p>Pollution of Soils and Water</p> <ul style="list-style-type: none"> Discharge of construction site/camp sewage effluent polluting watercourses. 	<ul style="list-style-type: none"> Installation of sewage treatment to meet required standards; hygiene training for workforce, at all construction installations, such as camps, workshops, active construction sites, etc. Development and implementation of a waste management plan as part of site specific ESIA and CESMP. Installing proper drainage at all construction sites.
<ul style="list-style-type: none"> Release of hazardous substances during construction, or operation (e.g. vehicle spills) leading to soil, surface or groundwater contamination. 	<ul style="list-style-type: none"> Materials handling and control procedures. Control of construction vehicle movements and prohibition of vehicle washing in watercourses, and similar practices. Emergency response plans during construction (contractors and local authorities) and operation (local authorities).
<p>Air Quality</p> <ul style="list-style-type: none"> Dust from construction, and other emissions during construction and operation, could affect human health, vegetation (including crops) and wildlife. 	<ul style="list-style-type: none"> Sensitive local route selection and siting of construction facilities. Dust control and suppression measures such water sprinkling during dry spells especially around inhabited areas, residentials, schools and health facilities. Modern equipment meeting appropriate emissions standards, and regular preventative maintenance. No use of ozone depleting substances during construction.
<ul style="list-style-type: none"> Emissions from vehicles during operation affecting sensitive receptors (human and flora/fauna). 	<ul style="list-style-type: none"> Sensitive route selection, grading of inclines, etc. Speed controls and other traffic calming measures to reduce excessive acceleration around towns.
<p>Noise and Vibration</p> <ul style="list-style-type: none"> Noise and vibration from equipment, traffic and activities 	<ul style="list-style-type: none"> Sensitive local route selection, grading of inclines, etc. and siting of construction facilities. Use of modern equipment fitted with abatement devices (e.g. mufflers, noise enclosures); good maintenance regime.

<p>during construction (and maintenance) at worksites and associated facilities, may disturb sensitive noise receptors (human and fauna).</p>	<ul style="list-style-type: none"> • Strict controls of timing of activities, e.g. blasting and other high noise emissions; prohibition on night working if possible. • Observance of seasonal sensitivities (e.g. breeding seasons), and alteration of activity to reduce noise levels at that time. • Speed controls and other traffic calming measures to reduce excessive acceleration around settlements/sensitive receptors.
<ul style="list-style-type: none"> • Noise and vibration from traffic during operation may disturb sensitive noise receptors (human and fauna). 	<ul style="list-style-type: none"> • Sensitive local route selection (e.g. by-passes around communities, grading of inclines), and siting of permanent facilities. • Speed controls and other traffic calming measures to reduce excessive acceleration near settlements/sensitive receptors.
<p>Resources and Waste</p> <ul style="list-style-type: none"> • Construction (and possibly operation) will require supply of water from surface or groundwater, which could affect existing supply for human communities and ecosystems. 	<ul style="list-style-type: none"> • Water study prior to any abstraction, to inform a Sustainable Water Management Plan. • No abstraction without prior approval of relevant authorities at all locations. • Promotion of water efficiency (including leak detection, preventative maintenance of equipment) and water recycling.
<ul style="list-style-type: none"> • Inefficient waste management during construction and maintenance leading to excess materials consumption, generation of wastes/emissions, soils and water pollution. 	<ul style="list-style-type: none"> • Preparation of Waste Management Plan following the waste hierarchy, supported by staff training. • Earthworks to be designed to achieve a balance between cut and fill wherever possible. • Use of authorized contractors for hazardous and any other wastes which the project cannot dispose of safely.
<ul style="list-style-type: none"> • Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways • Land clearance for new roads and upgrading of existing 	<ul style="list-style-type: none"> • Careful route selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists. • Wherever feasible, establishment of buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive and avoidance or minimization of activity within these zones.

<p>roads may cause loss or fragmentation of protected areas and other areas of conservation interest, and degradation following poorly managed rehabilitation.</p>	<ul style="list-style-type: none"> • Rehabilitation of cleared areas with native species, and ecosystem restoration in habitats of conservation value, using specialist advice and input, backed up by a long-term monitoring programme and corrective actions as necessary.
<ul style="list-style-type: none"> • Severance of terrestrial routes and watercourses used for migration or for access to feeding and breeding areas. 	<ul style="list-style-type: none"> • Sensitive planning of road alignments. • Wildlife crossings for terrestrial animals, and design of culverts/ crossing structures to avoid impacts on animal movement.
<ul style="list-style-type: none"> • Construction impacts on habitats and species (e.g. from changes in drainage, soil erosion, pollution of water, soils or air, introduction of invasive species, and general human disturbance). 	<ul style="list-style-type: none"> • Where development in sensitive areas cannot be avoided, mitigation may include: • Minimization of area impacted, clear demarcation of remaining intact areas of habitat, and prohibition of activity into those areas for any purpose; maintenance of wildlife corridors between fragmented areas wherever possible. • No ground clearance upstream of sensitive areas unless appropriately engineered drainage installed. • Habitat rehabilitation and ecosystem restoration of areas no longer required after construction, as soon as possible. • If loss of Critical Habitat is inevitable, development/implementation of an Offsets Programme. • See relevant sections re. control of impacts from pollution, invasive species, and induced access.
<p><i>Impacts from Induced Access</i></p> <ul style="list-style-type: none"> • Road developments into remote areas will facilitate access, and can lead to land clearance for agriculture, and increased disturbance and pressure on natural resources through bushmeat hunting, logging, fire, etc. 	<ul style="list-style-type: none"> • Careful route selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists to avoid remote and previously inaccessible areas where possible. • A construction camp siting strategy regarding siting to avoid attracting people towards more remote areas, where possible. • Restrictions on access to all temporary access roads, and their removal after construction.

	<ul style="list-style-type: none"> • See also Bushmeat Hunting below.
<p><i>Bushmeat Hunting</i></p> <ul style="list-style-type: none"> • Construction activities and access to remote areas could lead to greater demand for bushmeat (from workforce and wider community), stimulate the wildlife trade and facilitate access to hunting areas. 	<ul style="list-style-type: none"> • Bushmeat Hunting and Wildlife Trade Management Plan, agreed with government authorities and implemented jointly. • Prohibition on workforce hunting, selling, or purchasing bushmeat, and training to support this requirement. • Prohibition of the workforce (except security personnel) having guns in work areas or accommodation. • Sensitization and public awareness campaigns against hunting and bushmeat the trade amongst local communities.
<p><i>Direct Impacts on Flora and Fauna</i></p> <ul style="list-style-type: none"> • Clearance of vegetation may lead to loss of plant species and habitat of conservation interest. • Road development could displace animals and disturb their habitats, by direct disturbance during construction and operation (e.g. from noise, light disturbance at night, general human presence) 	<ul style="list-style-type: none"> • During preparation of the site specific ESIA's, undertake mapping of gazetted limits of all forest reserves, key biodiversity areas (KBA) and IBA, wetlands, national park and game reserves to avoid all encroachments and vegetation removal including opening borrow pits and quarry sites in such habitats. • Careful route selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists. • Careful planning of phasing and timing of construction activities. • Demarcation and avoidance of areas of conservation interest (high value species, feeding or breeding sites, migration routes, etc.) where possible, and wildlife rescue and translocation where appropriate, under expert supervision. • Avoid clearing culturally, economically and biologically valued trees.
<p><i>Invasive Species</i></p> <ul style="list-style-type: none"> • Movement of plant a workforce into areas, and of road traffic during operation, could introduce invasive species which adversely impact fauna, flora, ecosystems, and crops. 	<ul style="list-style-type: none"> • Invasive Species Management Plan, which should be developed and implemented in consultation with authorities, including appropriate eradication measures for different species/groups of species, as part of site specific ESIA's and/or CESMP. • Staff training and awareness raising in communities. • No introduction of exotic species (e.g. for site rehabilitation) without specialist vetting and government approval.

<p><i>Physical and Economic Displacement of People, Property, Assets and Resources</i></p> <ul style="list-style-type: none"> • Development or upgrading of roads may physically displace people or lead to the loss of assets. • Destruction / disruption of public utilities such as water supply, and electricity supply. 	<ul style="list-style-type: none"> • Careful route selection and siting of all project components and avoid occupation of areas which are inhabited or regarded as of high value by communities (e.g. horticulture, community orchards) where possible. • Early development and sensitive implementation of resettlement planning, in accordance with national regulations and international good practice to compensate for any losses (both physical and economic). • Relocate affected utilities before commencement of civil works. For water, provide alternative sources of water, as much as feasible, in consultation with the respective utility operators.
<p><i>Economic Development and Employment</i></p> <ul style="list-style-type: none"> • Direct employment of local population in workforce, and stimulation of local economy through demand for goods and services will enhance livelihoods and economic activity in local communities, but potentially adverse effects if community relations are not well managed. 	<ul style="list-style-type: none"> • Development of an Employment Plan, with clear employment requirements and procedures for the construction workforce in line with guidance provided in the project LMP. • Transparent and culturally appropriate communication with communities regarding employment opportunities. • Fair and transparent hiring and staff management procedures. • Employment requirements and vocational training plan to be agreed with local institutions, so that local people can be trained to meet the project’s needs in a timely fashion. • Development of measures to manage the transition after construction is complete, including SME development, ongoing opportunities for the workforce in road management and maintenance, reskilling and alternative employment.
<ul style="list-style-type: none"> • Procurement of local goods and services for the road development and workforce could deplete resources available for local communities. 	<ul style="list-style-type: none"> • Procedures for sustainable local procurement, in consultation with local authorities and community leaders. • Local capacity building to foster community resilience. • Monitoring of local prices, and exploration of corrective measures (e.g. alternative sourcing to reduce local pressure) if appropriate.
<p><i>Cultural Heritage</i></p>	<ul style="list-style-type: none"> • Careful route selection and siting of all project components, taking account of

<ul style="list-style-type: none"> • Displacement or damage to cultural heritage sites by construction activities, harm to the setting, amenity value, etc. of the site due to road construction or operation. 	<p>community consultation/specialist surveys.</p> <ul style="list-style-type: none"> • Development of a Cultural Heritage Management Plan covering tangible and intangible (e.g. local traditions and practices) cultural heritage. • Implementation of a “Chance Finds” procedure during construction.
<ul style="list-style-type: none"> • Community Health, Safety and Security • Poor construction management practices may lead to adverse effects on safety, human health and wellbeing of the host community and the public, especially related to risk of polluting community water sources, transmission of communicable diseases, traffic accidents. • Impaired/ cut off Access to Local Communities’ Services and homes. • Security risks in the northern provinces of Cabo Delgado, Niassa and Nampula occasioned by terrorists’ attacks. 	<ul style="list-style-type: none"> • Good construction site “housekeeping” and management procedures (including site access). • Disease control measures, e.g. no pools of standing water, rodent control, treatment of water. • Risk assessments and emergency response planning to consider impacts on local communities. • Development & implement Health & Safety Management Plan, Traffic Management Plan as part of ESIA and CESMP. • Provision of pedestrian lanes/paths, bridges, zebra crossing at areas of high human presence such as markets, trading center, settlement, schools among other gathering areas. • Provide safe and regular access of community to their houses/ services. • Provide clear signage at the construction areas including new directions for accesses. • Implement the measures contained in the Security Management Plan.
<ul style="list-style-type: none"> • Interaction between workforce and local communities may increase occurrence of communicable diseases, including HIV/AIDS and sexually transmitted diseases (STDs). 	<ul style="list-style-type: none"> • Implementation of a health management system for the construction workforce, to ensure it is fit for work and that it will not introduce disease into local communities. • Training and awareness training for workforce and their dependents on HIV/AIDS and other STDs, and communicable diseases including malaria; health awareness raising campaigns for communities on similar topics. • Create awareness on COVID-19 transmission, emphasize social distancing and wearing of masks, and emphasize washing hands regularly.

	<ul style="list-style-type: none"> • Provision of substance abuse prevention and management programs and Induction training for all workers on the Code of Conduct.
<p><i>Workforce-Community Interactions</i></p> <ul style="list-style-type: none"> • Real or perceived disruption to normal community life, through the physical presence of a construction workforce. • GBV/ SEA/SH risks and impacts 	<ul style="list-style-type: none"> • Prioritize hiring of more casual workers from the host community to minimize labour influx, in liaison with local leaders. • Adoption of a Stakeholder Engagement Plan, as a framework for early and ongoing community consultation. • Implementation of a Grievance Mechanisms contained in the SEP as early as possible during project preparation and throughout project implementation phase. • Works procedures, defining a Code of Appropriate Conduct for all workers. • Training for all staff in acceptable behaviour with respect to community interactions. • Implement the project GBV/SEA/SH Action Plan and undertaken extensive community sensitization in preventive measures.
<p><i>In-migration</i></p> <ul style="list-style-type: none"> • Individuals are likely to migrate into the area which may cause conflict with resident communities and put pressure on resources and infrastructure. 	<ul style="list-style-type: none"> • Careful route selection and siting of all project components, after consultation with communities and local authorities. • Preparation and implementation of an Influx/In-migration / Labour Management Plan, in consultation with local authorities. • Sourcing of local workforce and Creation of supervised leisure areas in workers' camp; Cooperation with local law enforcement; and enforcement of sanctions (e.g., dismissal) for workers involved in criminal activities.
<p><i>Labour and Working Conditions</i></p> <ul style="list-style-type: none"> • Poor management of occupational health and safety could lead to accidents, injuries and illnesses among workers; mental health issues may arise due to remote or enclosed 	<ul style="list-style-type: none"> • Employment practices and working conditions should conform to International Labour Organization (ILO) Standards, national regulations and project LMP. • Rest and recreational facilities and time should be provided, and rules on alcohol and drugs defined and clearly communicated to workers. • The basis for differences in the standard of accommodation should be non-discriminatory; it should be documented and communicated transparently to

<p>living.</p> <ul style="list-style-type: none"> • Differences in nationality, ethnicity, religion, etc. may lead to discrimination and harassment, and differences (perceived or real) in working conditions between workers may lead to resentments. • Likely deployment of child labour. 	<p>the workforce.</p> <ul style="list-style-type: none"> • Clear and comprehensive health and safety reporting and workers' grievance procedure system should be established and be freely available to all of the workforce. • Contractors to provide PPE to all workers, free of charge. • Contractors to undertake workplace risk assessment. • Inductions and regular trainings for all workers on OHS risks. • Carry out a comprehensive health awareness campaign to prevent major outbreaks of communicable diseases (including COVID 19). • Control dust by spraying water during construction and control vehicular emissions during construction and operation stages. • Prepare a construction site management plan, which should explicitly focus on the elimination of wastes and ponding through good housekeeping practices. • Assign higher priority to any accident preventive measures. Assign higher ranking to the proper design of safety features to prevent accidents. • Draft a proper traffic management plan for the construction phase including details of road signs, markings, intersection layouts, canalization of flows, access restrictions, footpaths, bus stops, and provisions for non-motorized vehicles. • Enforce good housekeeping practices on work sites and in workers' camps. Enforce laws, regulations, and policies related to construction equipment, sanitation, and vehicle safety. • Provide all workers with employment contract, including workers' Code of Conduct to regulate their behaviour at work and while interacting with host community. • Put in place emergency response measures for accidents and incidents to workers. • Maintain Incidents/ Accidents Register and report all Serious and Severe Accidents to Health and Safety Authorities (INATRO) and the traffic police, as
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	<p>applicable.</p> <ul style="list-style-type: none"> • Undertake root cause analysis, development and implement Safeguards Corrective Action Plan, following all incidents and accidents. • The project shall not employ child labour or underage workers. • Develop as part of CESMP work-method statements for hazardous tasks such as working at heights, confined spaces, hot works, etc.
<p><i>Operations of the ancillary/ supporting facilities such as Camps, Quarries, Gravel borrow pits, batching plants, etc</i></p>	<ul style="list-style-type: none"> • All ancillary/ supporting facilities shall be subjected to E&S screening, baseline surveys/assessments and where necessary, ESIA/ESMPs developed before commencement of their operations. • All ancillary facilities shall be located away from residential establishments, schools and hospitals, while observing the need to ensure public health and safety. • Quarries and borrow pits shall not be established in or near national, provincial, district and village conservation forests and other ecologically sensitive and protected areas. • All construction materials source sites shall be subjected to E&S due diligence to ascertain their compliance with National E&S statutory requirements before they are engaged to supply such materials, if required. • Blasting within 500 m of residences will be carried out only with permission of the concerned authority and the community and after conducting a condition survey of the immediate surroundings especially in regard to the nearest sensitive receptors, using a pre-established schedule. • All the statutory laws, regulations, rules etc., pertaining to acquisition, transport, storage, handling and use of explosives will be strictly followed. • The quarry blasting timing will be made available to the local people within 500 m of the blasting site in all directions, depending on the total charge used. Under no circumstance will blasting be undertaken at night. Where possible blasting mats will be used to reduce flying rock.

	<ul style="list-style-type: none">• Complaints of damages shall be managed through the project Grievance Redress Mechanism (GRM) that will be established prior to construction.• The Contractor shall have GRMs established at/or near every ancillary facility, and their operations guided by the general GRM under the project's SEP.• During quarry and borrow site operation, provide adequate drainage to avoid accumulation of stagnant water.• Upon completion of extraction activities, re-contour borrow/quarry pit wall or fill-up when there are available and suitable materials such as excavation spoils, replace topsoil, and re-vegetate with native species such as grasses and fast-growing shrubs and trees. The Contractor restoration plan shall be submitted as part of the Site Specific CESMP that shall be approved by ANE, IP and the WB.• It is possible that villagers may request borrow pits to be left excavated so that they may be used as water reservoirs or fishponds. If this were to be agreed between the contractors and the villagers, all the full safety measures detailed above must be observed. Such agreements would be formalized in writing between the contractors and the villagers after full discussion with all concerned parties.
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5.3 Cumulative Impact Assessment

5.3.1 Introduction

Cumulative impacts are those that ‘result from the successive, incremental, and/or combined effects of an action, project, or activity when added to other relevant past, present and reasonably foreseeable developments as well as unplanned but predictable activities enabled by the project that may occur later or at different location.

The purpose of a cumulative impact assessment is to determine how the potential impacts of a proposed development might combine cumulatively, with the potential impacts of other projects and subprojects or human activities as well as natural stressors such as droughts or extreme climatic events.

The objectives and expected outcomes of a Cumulative Impact Assessment process are:

- Identification of Valued Environmental and Social Components (VECs) such as air, water, soil etc. that may be affected by the Project and the selected VECs the assessment will focus on;
- Identification of existing and reasonably anticipated and/or planned developments, as well as natural environmental and external social drivers, that could affect the selected VECs;
- Assessment and/or estimation of the future condition of selected VECs, as the result of the cumulative impacts that the development is expected to have, when combined with those of other reasonably predictable developments;
- Evaluation of the future condition of the VECs relative to established or estimated thresholds of VEC condition or to comparable benchmarks; and
- Avoidance and minimization of cumulative impacts of the Project on the VECs and Monitoring and management measures to ensure the VEC viability over the life span of the development or its impacts.

5.3.2 Identification of Valued Environmental and Social Components

During the preparation of this ESMF a preliminary assessment of cumulative impacts of several environmental and social parameters has been carried out and some parameters such as construction noise and vibration impacts, air quality (particulates), water pollution, etc. have been considered. The ESMF includes the assessment of cumulative impacts as a result of the project itself and any cumulative impacts from existing neighboring projects.

5.3.3 Identification of other Activities and Environmental and Social Drivers

At this stage, the exact location and scope of most of the sub projects and supporting/ auxiliary facilities such as workers campsites, quarries and borrow pits, is not known, hence the CIA is unable to establish whether there are barriers to unknown future development within the project area of influence.

5.3.4 Other Existing related projects in the project area of influence

The main projects that are already under implementation in the project area and may generate similar impacts with CRRN project include (*Source: ANE, Jan. 2024*):

- i. Nambungale-Roma (ongoing).
- ii. Reconstrução de pontes e aquedutos na Estrada Montepuez-Mueda (ongoing).
- iii. Reabilitação das estradas: Mueda-Oasse-Xitaxi e Macomia-Sunate (Planned).

5.3.5 Assessment of Cumulative Impacts on VECs

There are several on-going projects and activities by Government of Mozambique, and other development actors to support development of Northern Mozambique. Possible concurrent implementation of all these projects and interventions within the same project area or in proximity of the CRRN project has the potential to generate cumulative impacts. The most critical cumulative impacts on environment and social systems will include:

i) Improved household and community resilience to climate change and poverty eradication.

Several projects being implemented target vulnerable households and communities. They are pursuing interventions that are meant to address household vulnerability. The Northern Mozambique ongoing and planned projects listed under the previous Section are all implementing the projects targeting alleviating climate change vulnerability. Positive impacts associated with this project will be enhanced by benefits already projected or realized from these other projects. The need to coordinate these interventions, however, should be emphasized.

ii) Multiple sources of employment and income

Projects being implemented in the project area have an employment component. They all seek to employ residents within the northern part of Mozambique. This is a positive impact that will widen sources of income. However, multiple employment avenues may end up curtailing skills development and local workers may end up in cyclic oscillations from one project to another. A high labour turnover does not aid project implementation. Delayed progress may be recorded on all projects.

iii) Competition for Labour

Related to multiple sources of income is competition for available labour hence pushing up local labour costs. The ongoing projects will be targeting the same labour pool with a resultant effect of high labour costs and turnover. Projects designed with meager labour costs may end up failing to achieve their target progress levels.

iv) Material source areas footprints and restoration

Cumulative impacts related to extraction of construction materials from rock quarries, sand mines, surface water points and borrow areas will emanate. All listed projects have either a road construction component or related infrastructure. Excessive pressure will be exerted on such areas leading to environmental degradation. Reopening used quarries and borrow areas will be common as different contractors seek to cut costs. Managing footprints of material source areas is hence predicted to be an impact of major significance.

v) Relocation of public utilities and infrastructure

Infrastructure construction projects by utility companies tend to pass through the same corridor along the proposed road. Lack of coordinated infrastructure development will lead to constant relocation of such facilities at a high cost. Also, there will be a challenge in compensation and relocation of affected households since they will always be affected by one service after another. Consultative procedures must be followed during relocation.

vi) Physical Impacts related to construction noise and vibration impacts, air quality (particulates), water pollution.

Infrastructure construction projects typically pose E&S risks and impacts of nuisance noise, dust emissions, and water pollution. Such impacts will be compounded by multiple projects which may happen to be implemented a period of time, either one after the other, exposing communities to prolonged related impacts, or those which may be implemented at the same time, compounding the magnitude of the impacts. These need to be considered during site specific ESIA's.

6.1 Introduction

Stakeholder engagement is an inclusive process that will be conducted throughout all the stages of the project. It is aimed to support the development of strong, constructive, and responsive relationships which are important for the sustainability and acceptability of the project. Stakeholder engagement is most effective when initiated at an early stage of the project development process and is an integral part of early project decisions and the due diligence assessment, management and monitoring of the project's environmental and social risks and impacts. Consultations were conducted from 15 January to 23 February 2024. Details of the consultations process and outcomes are contained in the Stakeholders Engagement Plan (SEP) prepared alongside this ESMF.

6.2 Major Issues Raised by Stakeholders

Consultations were conducted mainly in Portuguese language and a few occasions in English. Community Meetings were conducted in the respective local dialect. Thence, minutes and raised concerns were recorded in Portuguese but summarized in English for easiness of ESMF reference. All issues raised were noted and recommendations for their consideration by the project have been provided. These will also be addressed in the specific ESIA, ESMPs and RAPs of each sub-project. Below is a summary of the major issues raised during public consultations while further details can be found in the project SEP:

- i. the project should rigorously include measures to mitigate the climate change effects and such measures be integrated into the road designs. This implies findings from studies on the project should inform the designs of the roads.
- ii. the road engineering designs should consider the flood peak volume and provide drainage infrastructure (box culverts, bridges) that is commensurate with the risks posed by floods during such periods to avoid submerging and washing off road infrastructure.
- iii. Have measures for traffic management during road works because these roads will be open to traffic during project implementation.
- iv. drainage should also be considered on flood plains where water flows to avoid flooding people's property and soil erosion. This implies that, the drainage facilities should not be directed towards homesteads and gardens to the extent possible.
- v. the environmental and social instruments of the project should consider the National Roads Code and other applicable legal and policy instruments to ensure coherence and complementarity of the project and GoM development strategies.
- vi. the ESMF should include recommendation that site specific ESIA/ESMP consider provisions on risk assessment of climate effects and present provisions for mitigation. Gender and climate change aspects must also be considered.
- vii. the project should observe the principles of local content, ensuring that national labor is prioritized in the hiring processes.
- viii. Our roads (in Pemba) do not have information or road safety signs. So, does the project foresee the installation of information signs? Yes, the second component of the project deals with improving road safety.
- ix. The project should employ a Project Liaison Officer to play an interphase role between the project and the communities. This is important in that, of late and in many areas where Government is implementing projects, the relation between the communities and the

contractors is characterized by accusations of harassment by the contractors' teams especially Chinese workers.

- x. The province of Cabo Delgado is experiencing a moment of insecurity. So, how will ANE implement the project in critical areas. Within the scope of the project's environmental and social instruments, there is a security risk assessment to support the project. Therefore, this instrument, in addition to providing information about the risks that exist in the project's intervention areas, proposes safety measures and a flowchart for assistance in the event of an emergency; and
- xi. In projects implemented in security disturbed areas, GBV problems have occurred. So, does this project involve institutions that look after GBV? Yes, the project has an Action Plan to respond to GBV/SEA/SH, and the plan includes institutions as relevant elements for responding to the issue of GBV/SEA/SH. This GBV/SEA/SH action plan already presents actions to raise awareness among the local community so that the risk can also be controlled on the community side.

6.3 Recommendations on Stakeholders' Views

From the Stakeholders' views, this ESMF recommends development of "Local content Plans in ESMPs" for each subproject under CRRN project to ensure that members of local communities are effectively given priority during recruitment of labor and have descent work conditions. Broader stakeholder consultations shall be undertaken during ESIA and RAP development for each subproject and their concerns integrated into the respective subprojects designs and in addition utilized to identify project related impacts and device mitigation measures.

6.4 Project Information Disclosure to the Public

In compliance with World Bank ESF (ESS 10 & other relevant ESSs) and the ESIA (Decree No. 54/2015, of December 31st); disclosure of relevant safeguard documents helps affected communities and other interested parties to understand the scope and associated risks, impacts and opportunities. This allows the public and other stakeholders to comment on the possible E&S impacts of the roads projects. It also helps the appraisal team to strengthen the frameworks as necessary, particularly measures and plans to prevent or mitigate any adverse E&S impacts.

The Second round Provincial Consultations conducted between February 19 – 23, 2024 in Pemba, Nampula and Niassa served the purpose of disclosing key project information to the stakeholders. Disclosure comments received from both the Central Government Institutions/ Agencies and Provincial Consultations have been considered and accordingly informed the finalization of the project E&S instruments. All the details concerning the Stakeholder consultations can be found in the project SEP.

7 ENVIRONMENTAL AND SOCIAL ASSESSMENT AND MANAGEMENT PROCEDURES

7.1 Introduction

This chapter provides specific stages to be undertaken for E&S screening process, review and approval of CRRNP sub-project activities. Once the sub-project components have been identified, locations selected, and their scope confirmed, ANE,IP will have to use this section as the guideline for undertaking E&S screening of sub-project components, guiding conduct of required E&S assessment/s and implementing the appropriate measures while ensuring compliance to all respective WB E&S framework (ESF), applicable Environmental and Social Standards and Mozambique's legislative requirements for ESIA for development projects as stipulated in the Decree 54/2015 and Environmental Impact Assessment Regulation (**Decree No. 54/2015, of December 31st**). The Ministry for Land and Environment (MTA) is responsible for the final decision in the E&S assessment process. The procedures presented in this section are established as a framework to ensure compliance throughout project cycle i.e. identification, preparation and implementation.

7.2 Key Steps in Environmental and Social (E&S) Assessment Process

Section 3.3 provides detailed ESIA process in Mozambique and this Section 6.2 provides a summary of the same which is materially consistent with the provisions of the WB ESF/ESS-1.

7.2.1 Step 1: E&S Screening and Scoping of Project Activities and Sites

The first step of the EIA process in Mozambique is E&S Screening of the proposed development project, where the sub-projects activities are categorized. In the first instance, each subproject shall be considered on the basis of its eligibility to be supported and financed under the project. All project activities considered to be of HIGH Environmental and Social Risk Category (ESRC) shall NOT be eligible to be supported and/or implemented under CRNN project. Project components considered to be of ESRC Substantial, Moderate and Low shall be considered for implementation. Once screened and considered of eligible ESRC, it is at this stage that the level of the required ESIA is determined whether a full, simplified or no EIA to receive the permit after approval by the MTA through multi-sector technical review committee.

Environmental and social screening is undertaken to anticipate the likely risks and it facilitates early identification of potential impacts and consequently guide on the needed level and form of assessment that is commensurate with the anticipated risk level. The screening based on World Bank's ESF also establishes a Project's Environmental and Social Risk Classification whereas on Government of Mozambique's Decree 54/2015 and Environmental Impact Assessment Regulation (Decree 45/2004) this establishes the form and level of assessment required. ANE, IP will carry out scoping and screening of the sub-projects using the Environmental and Social Screening Form (ESSF) in Annex 1. The ESSF requires information that determines the characteristics of the prevailing local bio-physical and social environment with the aim of assessing the potential project impacts on it. The ESSF also shall be used to identify the potential socio-economic aspects that will require assessment, mitigation measures and or resettlement and compensation. Besides the onsite-specific characteristics and scope of subproject activities, the E&S screening shall take into consideration the preliminary assessments that have been provided in the ESMF under Chapter 2 (project components and activities), Chapter 3 (Relevant ESSs and requirements), and Chapter 5 (Potential Impacts and Mitigation).

7.2.2 Step 2: Assigning Appropriate Environmental and Social Risk Classification and Determining Level of E&S Assessment

In summary, ANE, IP in consultation with WB E&S Specialists, and MTA will then assign the appropriate environmental category to the subprojects based on the information contained in the ESSF and the national criteria for categorization. At this stage, the project is classified as SUBSTANTIAL risk based on World Bank’s ESF, as explained below and in Chapter 3. Under WB and GoM requirements and depending on the specific sub-project under consideration/selection, a Full ESIA and/or simplified ESIA suffices. The potential categories, in line with the National requirements are further elaborated below. TORs shall be prepared by ANE, IP, reviewed, and cleared by WB & MTA, depending on the ESRC and level of ESA required.

Environmental and Social Risk Classification (ESRC):

The ESF classifies all projects into one of four classifications of Environmental and Social Risk Categorization (ESRC): *High Risk, Substantial Risk, Moderate Risk or Low Risk, which respectively translate to the National Classification of Category A+, Category A, Category B & Category C.* In determining appropriate risk classification, the ESF considers relevant issues, such as the type, location, sensitivity, and scale of the project; the nature and magnitude of the potential environmental and social risks and impacts; and the capacity and commitment of the Borrower (including any other entity responsible for the implementation of the project) to manage environmental and social risks and impacts in a manner consistent with the ESSs. The categorization also takes into consideration context issues which could be relevant to the delivery of E&S mitigation measures and outcomes depending on the specific project. Context issues may include legal and institutional considerations, the nature of the mitigation and technology being proposed, governance structures and legislation, issues relating to stability, conflict, and security. Similarly, Mozambique’s Decree 54/2015 and Environmental Impact Assessment Regulation (Decree 45/2004) considers project type, location, sensitivity, scale and nature of E&S risks and impacts, and this in turn is used to determine the level of E&S Assessment to be undertaken, ranging from E&S Screening (Category C/ *Low Risk*), Simplified ESIA (Category B/ *Moderate Risk*), Full ESIA (Category A/ *Substantial Risk*) and/ or Full ESIA and supervision & review by Independent Experts (Category A+ / *High Risk*). Where necessary, the E&S Risk Classification may be adjusted based on the adaptive principle under ESS-1. ESRC is reviewed and revised throughout project implementation to ensure that it continues to be appropriate. Any change in ESRC will be disclosed in WB’s and ANE’s websites. The following guidance shall be used to screen and determine ESRC of subprojects:

Table 7-1: Summary of project categorization based on the ESF.

Aspect	High Risk / Category A+	Substantial Risk / Category A	Moderate Risk / Category B	Low Risk / Category C
Project type, location, sensitivity, scale	Complex large to very large scale in sensitive location(s).	Not as complex; large to medium scale not such sensitive location.	No activities with high potential for harming people or environment;	Few or no adverse risks and impacts.

			located away from sensitive areas.	
Nature and magnitude of risks & impacts, available mitigation	Mitigation unproven: unable to entirely address significant risk; high residual value.	Mitigation more reliable: significant risks but possible to avoid or address.	Easily mitigated: site specific, low magnitude risks.	Nothing to mitigate- no further assessment after screening.
Borrower capacity and commitment	Challenges and concerns about track record regarding E&S issues, significant stakeholder engagement capacity, commitment, track record concerns.	Some concerns about borrower track record, engagement capacity but readily addressed.	Sufficient borrower experience, track record, stakeholder engagement capacity.	Minimal or negligible risks to and impacts on human populations and/or the environment
Context of risk relevant to ES measures	Significant effects on ability to mitigate risk - significant contextual risks outside project control impacting on E&S performance and outcomes.	Some effects on ability to mitigate risk - known and reliable mechanisms to prevent or minimize, enforcement is weak in some respects, some stakeholder engagement concerns but readily addressed.	No effects on ability to mitigate risk-no contextual risks with effects on E&S performance	Negligible risk.

Substantial ESRC: The project's Environmental and Social Risk Classification is rated as Substantial considering that (i) the physical interventions planned under the project correspond mainly to rehabilitation or upgrade of existing secondary and tertiary road segments and bridges, which will occur within the existing rights of way, and are not expected to cause significant adverse risks and impacts on areas of high value or sensitivity, project activities are anticipated to be of moderate scope and their E&S risks can be mitigated with readily available and reliable measures. The environmental impacts will be mainly associated with the small to medium-scale civil works planned under Component 1, including soil and water resources pollution, dust and noise emissions, generation of hazardous and non-hazardous waste, and occupational and community health and safety risks. These

risks and impacts will be primarily site-specific (focusing on the areas interfered with by civil works), temporary, reversible, and manageable through cost-effective mitigation measures. The social risks and impacts are due to interventions which may generate some degree of social conflict, harm, and human security risk, associated with the fact that contractors will need to work in a conflict environment and engaging with returning IDPs to liberated areas. However, given the likely operational risks associated with the security risks in the Northern Region, the environmental and social risk classification will have to be reviewed and revised periodically or regularly (at most quarterly) to adopt to the prevailing circumstances, particularly due to security risks which will impact civil works planned for Cabo Delgado province, posing associated adverse occupational health and safety risks, social risks related to potential sexual exploitation and abuse, and sexual harassment in such fragile, conflict and violent environments. As assessed, the current situation is under control by the Government and any works to be undertaken in conflict affected areas, shall be done in line with the provisions in the Security Management Plan.

The screening based on the GoM requirements results in the following categorization and level of assessments:

- Category A+ requires full ESIA and the supervision and review of (an) independent expert (s);
- Category A requires only a full ESIA;
- Category B requires a simplified ESIA; and
- Category C requires no ESIA but compliance with General Procedures of Good International Practice in Environmental Management in the form of an environmental management plan.

Level of required ESIA

If the proposed project is fully screened and determined that it will require a full EIA or Simplified EIA, then a proponent is asked to undertake a Scoping study. All activities that fall under Category A+ or A require scoping, but to a different extent. For activities of Category A+ and A, an Environmental Pre-Viability Study (EPDA) that also includes the development of the ToR must be done. Activities in Category B only require Terms of Reference for the Simplified Environmental Report (SER), but no EPDA. The proponent is responsible for writing the EPDA. An essential aspect is that the proponent identifies the likelihood of negative E&S impacts and proposes adequate and acceptable mitigation measures. The EPDA report is reviewed by a multi-sector technical review committee. The technical committee reviews the scoping report of A+, A and B projects. It provides comments and asks for additional information to the proponent when regarded necessary. The scoping process helps the project developer to identify key environmental and social issues associated with the proposed project. Equally, Scoping may be an end of the ESIA process if the risks and impacts found at the end of the scoping exercise are insignificant and the proposed mitigation measures are commensurate to the likely E&S risks and impacts.

Tables 7-2: Preliminary subprojects ESRC and or level of assessment/ Instruments – to be reviewed and revised during the implementation phase based on site-specific Screening and Scoping:

Subcomponent 1.a) Upgrade and rehabilitation of Roads

(a) Works

Road	Length (km)	Intervention	Province	Preliminary ESRC / Instrument
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N381 Mueda - Xitaxi	52	Upgrade	C. Delgado	Substantial/ Category A requires only a full ESIA
R762 Muepane - Quissanga	15	Upgrade	C. Delgado	-do-
N380m Muagamula - Xitaxi	25	Rehabilitation	C. Delgado	-do-

(b) Consultancy Services Roads for preparation of concept designs & bidding documents (Phase II)

Road	Length (km)	Intervention	Province	Preliminary ESRC / Instrument
R775/1260 Palma - Namoto	47	Upgrade	C. Delgado	Substantial/ Category A requires only a full ESIA
R760 Muxara - Mecufi	43	Upgrade	C. Delgado	-do-
N361 Lichinga - Lago Niassa	98	Rehabilitation	Niassa	-do-
N360 Metarica - Marrupa	167	Upgrade	Niassa	-do-
R733/1211 Lussimbesse - Matchedje	206	Upgrade	Niassa	-do-
R657 Magige - Cuamba	93	Upgrade	Niassa	-do-
R689 Angoche - Monapo	160	Upgrade	Nampula	-do-

Subcomponent 1.b): Construction and rehabilitation of bridges and drainage structures

Bridge/River Name	Length (m)	Intervention	Province	Preliminary ESRC / Instrument
Mirohote	45	Construction	C. Delgado	Moderate/ Category B requires a simplified ESIA
Muaguamula	40	Construction	C. Delgado	-do-
Muera 1	55	Rehabilitation	C. Delgado	-do-
Muera 2	30	Construction	C. Delgado	-do-
Nango	35	Construction	C. Delgado	-do-

Screening of sub project soft activities

Certain activities related to implementation of sub projects should also have environmental and social aspects considered. For example, purchase of equipment under Component 2 (improvement of road safety), and Component 3 (Institutional strengthening and project management), would fall under Category C in the Mozambican ESIA process and classified as Moderate to Low risk under ESS-1.

However, environmental and social recommendations regarding energy efficiency, reduced pollution potential, use of renewable energies, etc. are proposed as the outcome of a screening process for these sorts of project activities. Most of the activities under Component 3 shall require environmental and social screening and recommendations to enhance their sustainability and value addition in terms of E&S proofing, enhancing health and safety outcomes from the safeguards point of view or on Climate Change adaptation measures, for example: (a) improvement of the knowledge in road asset management at the national and provincial levels – *while mainstreaming E&S considerations*; (b) acquisition of equipment for road and traffic data collection for improvement of the capacity of road network management – *while taking into consideration resource efficiency & health and safety aspects* (c) project operating costs, goods and training – *without leaving out the related E&S O&M cost implications through development of operational ESMP*; (c) technical assistance for implementation of the project – *which also includes E&S aspects*; (d) enhancement of climate resilience in planning and management of road infrastructure – *with key consideration of climate adaptation elements of road infrastructure right from design to operation stages*; (e) preparation of maintenance strategy, - *which is cognizant of E&S aspects* and (f) mobilization of private sector to invest and participate actively in the road rehabilitation, maintenance and management of road network, - *while cognizant of their respective E&S requirements and implementation implications*.

7.2.3 Step 3: Carrying out Environmental and Social Assessment process.

Detailed ESIA and review process is described under Section 3.4.

ANE,IP is responsible for the overall assessment process. The ESIA process is guided by the approved ToR that is established during the scoping stage. Sample ESIA TORs to be customized to each subproject assessment is provided under Annex 2. The methods of the assessment undertaken in the ESIA shall be specified in the ToR based on the findings of the site-specific E&S Screening and Scoping. The ESIA and simplified reports shall be submitted to MTA for review and consideration for approval. World Bank also reviews and clears the TORs for conduct of ESIA before commencement of ESIA studies.

7.2.4 Step 4: Carrying out Stakeholder and Public Consultations and Disclosure

Consultations shall be conducted as part of E&S assessment process, right from project concept development to seek views on the design aspects from various stakeholders, during the ESIA, moving into commencement of implementation and throughout the implementation phase. Views of stakeholders (host community, public and government agencies) have to be included in the ESIA report. ANE, IP and the respective Provincial Authorities, and Districts Governments will interact closely with beneficiary communities, government departments, and NGOs, right from the early stages of the project preparation on a continuous and regular basis for developing and implementing the respective project ESIA. During the consultations, ANE, IP will ensure that accurate information is given about the project and its possible environmental and social impacts. The opinion/suggestions made by the community/affected groups shall be incorporated in the respective ESIA and ESMPs, and subsequently in the designs.

A second round of consultations are undertaken on the draft ESIA reports, to discuss the preliminary findings and mitigation recommendations with a view to validate them and ensure incorporation of any final views and recommendations from the stakeholders. The consultations undertaken on draft ESIA serve the purpose of disclosing the prepared instruments. Disclosure of the E&S instruments is

undertaken by both Government and the World Bank on their respective websites and distribution of the draft instruments to various and mapped stakeholders for comments.

7.2.5 Step 5: Review and Approval

A temporary multi-sector technical review committee is set up to review the EPDA. The same committee also reviews the ESIA report. The committee submits a report with its comments to MTA, which also takes into account all the comments made by the public during the review process. For A+ projects, the review report of the independent expert is included (mechanism not yet operational). During the review process, the proponent may be required to submit additional information to assist the review committee. The proponent has 10 working days to comply with these requests. The findings of the report of the committee form the basis for the decision-making process by MTA regarding the granting of the Environmental and Social approval and License.

The review of the Simplified Environmental Report (SER) also entails the set-up of a technical committee comprising of various (local) representatives and technical experts. Through the review committee relevant expertise from within government can be involved in the review. This committee may also request additional information from the developer if the committee is not satisfied with information and relevant documentation in the draft ESIA Report. If the review is satisfied with the additional information provided, the committee provides recommendations to MTA regarding the issuing of the Environmental License.

Besides the review by the Government Authorities, ESIA reports for subprojects are reviewed and cleared by the World Bank. It is good practice to gain World Bank's clearance before approval by MTA.

Environmental Licenses are valid for a period of five years. They are then renewable for an equal period. The license is a prerequisite for the issuance of any other license or permit that may be legally required. The decision on the ESIA approval and the issuance of the license are both taken by the central EIA authority. MTA is the competent authority for activities of Category A+ and A, and its provincial departments may issue the license for Category B and C projects.

7.2.6 Step 6: Environmental and Social Implementation and Monitoring

The Implementation step then follows approval of the ESIA/ESMP. Environmental and social monitoring aims at checking the effectiveness and relevance of the implementation of the proposed mitigation measures. The project will be monitored and supervised throughout its lifetime. This shall be achieved through reporting, site visits/supervision, and information from third parties, such as through grievance redress mechanism, conducting independent annual audits, and civil society. Monitoring exercises shall be undertaken in sequences and frequencies stipulated in the ESCP, ESIA, ESMPs, or RAPs. ANE, IP E&S Specialist and the Provincial Government leaders, Districts will undertake monitoring exercises. ANE, IP will have the lead role in monitoring to ensure that various project environmental and social obligations are met and will ensure that the requirement for an environmental and social audit is fulfilled on a periodic basis. The monitoring indicators will be developed by ANE, IP's project Environmental and Social Specialists based on the mitigation measures and the ESMP. It is critical to note that MTA has a regulatory and coordinating role in monitoring compliance with permits, standards, regulations and all approval conditions.

If engaged, the Contractor-related E&S plans shall be prepared by the respective Contractors, building upon ESMP/s prepared for each subproject as part of respective designs that shall be drawn for implementation. In addition, the operational entities who benefit from the project to expand their

operations, shall be required to update their Operational ESMPs to incorporate applicable E&S mitigation measures.

Monitoring and Evaluation

Adaptive management recognizes the dynamic nature of the project development and implementation process, as well as the rapidly changing environments in which the project operates. Based on the results of the monitoring, amendments may be made to management plans or project commitments to the Bank. In addition to reflecting changing needs that arise as part of the monitoring process, changes in project design, unforeseen events, or regulatory or political changes might require a change in the original environmental or social approach, including those regarding the security context in which the project will operate in the Northern Region.

Reporting

RF/ANE,IP will undertake quarterly Reporting to the Bank quarterly on the implementation of the project’s environmental and social performance, paying particular attention to whether the impacts and planned mitigation measures were adequate or whether adjustments are needed to meet the overall objectives of the project and the agreed environmental and social commitments.

7.3 Contingent and Emergency Response Components (CERC) Subprojects E&S Procedures

Contingent and Emergency Response component will facilitate access to rapid financing by allowing reallocation of uncommitted project funds in the event of a natural disaster, either by a formal declaration of a national or provincial government of emergency or upon a formal request from the Government of Mozambique. Component 5 will use IDA Immediate Response Mechanism.

This CERC section of the ESMF defines supplemental information on the environmental and social management required for the implementation of the emergency activities to be carried out under the CERC, which intends to make unspent project resources available to respond to natural disasters.

The approach to E&S management procedures for CERC Subprojects is as follows:

- Register a Triggered CERC and confirm its eligibility against the Exclusion List;
- Identify Subprojects likely to be undertaken based on the nature of the registered natural disaster and those presented by the Emergency Committee, confirmed by ANE, IP as being eligible;
- b) Identify E&S risks and impacts of the Subprojects to be undertaken;
- Prepare a Screening tool for these CERC subprojects;
- Conduct E&S screening and develop ESMP as appropriate; and
- Implementation, monitoring and reporting arrangements.

7.3.1 CERC Subprojects Identification

The first stage is the identification of potential activities to be financed by CERC. In the event of CERC Component activation, the following activities will be covered: goods, services, and works as identified in the Positive List stated in the table below. **(To be confirmed by ANE & WB based on project design PAD and CERC Manual)**

Table 7-2: List of eligible expenses under CERC

Table A	List of Eligible Expenses based on Categories
Category	Description

Goods	(7) Construction materials and industrial machinery; (ii) water, land and air transport equipment, including supplies and spare parts; (iii) agriculture, school, medical and communications equipment and supplies and (iv) petroleum and fuel products.
Works	Urgent infrastructure works (repair, rehabilitation, construction, cleanup etc.) to mitigate the risks associated with the disaster.
Consulting Services	Urgent studies (technical, environmental & social, assessments, audits, surveys, etc.) necessary to determine the impact of the disaster and to serve as a baseline for the recovery and reconstruction process (identification of priority activities, feasibility assessments, delivery of related analyses, etc.), or other relevant consulting and non-consulting services related to the implementation of the CERC.
Non-Consulting Services	Drilling, aerial photographs, satellite images, maps and other similar operations, information and awareness campaigns (messages and radio and television spots, etc.), and any other suitable service in this category.
Emergency Operating Costs	Incremental expenses as defined by IRM-CERC Projects' financing agreements incurred by the Government for early recovery efforts arising as a result of the impact of an emergency, in addition to civil servant salaries in critical sectors (e.g. health and education) for a defined period.

The contingency activities could be implemented anywhere in Mozambique. Given the nature of funding under CERC, that is generally to fund immediate priority activities for recovery in an event of natural disaster, activities to be funded should be as less complex as possible, i.e., those with minimal environmental and social implications. An emergency Subproject with likelihood of influencing resettlement or complex environmental mitigation measures should be avoided under the CERC, and if required their implementation differed to a later period after completion of a simplified ESIA and development of an ESMP acceptable to GoM and the WB.

To ensure that adverse impacts will not occur given the nature of emergency, the items and activities identified in the table below are prohibited.

Table 7-3: Prohibited Activities for CERC

PROHIBITED ACTIVITIES FOR CERC (To be validated and confirmed by ANE & WB based on project design)

1	Uses for goods and equipment financed by the CERC, which also applies to use and storage for Disaster Risk Management-related activities including hazard monitoring, disaster preparedness, and future response to natural disasters.
2	Activities of any type classifiable as High risk in ESS 1.
3	Activities that would lead to conversion or degradation of critical forest areas, critical natural habitats, and clearing of forests or forest ecosystems.
4	Activities affecting protected areas (or buffer zones thereof), other than to rehabilitate areas damaged by previous natural disasters.
5	Land reclamation (i.e., drainage of wetlands or filling of water bodies to create land).
6	Land clearance and leveling in areas that are not affected by debris resulting from the eligible crisis or emergency.
7	Activities that will result in the involuntary taking of land, relocation of households, loss of assets or access to assets that leads to loss of income sources or other means of livelihoods, and interference with households' use of land and livelihoods.
8	Construction of new roads, realignment of roads, or expansion of roads, or rehabilitation of roads that are currently located on communal lands but will be registered as government assets after rehabilitation.
9	Construction works, or the use of goods and equipment on lands abandoned due to social tension / conflict, or the ownership of the land is disputed or cannot be ascertained.
10	Construction works, or the use of goods and equipment to demolish or remove assets, unless the ownership of the assets can be ascertained, and the owners are consulted.
11	Construction works, or the uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor.
12	Construction works, or the uses of goods and equipment for activities that would affect people, unless due consultation and broad support has been documented and confirmed prior to the commencement of the activities.
13	Activities which, when being carried out, would affect, or involve the use of, water of rivers or of other bodies of water (or their tributaries) which flow through or are bordered by countries other than the Borrower/Recipient, in such a manner as to in any way adversely change the quality or quantity of water flowing to or bordering said countries.
14	Use of asbestos-based construction materials for reconstruction works.

7.3.2 Summary of Potential Impacts of the Proposed Activities/ subprojects

A summary of potential impacts of the proposed activities/Subprojects are presented in the following table.

Table 7-4: Potential impacts of the proposed activities to be carried out under Component 4 (CERC)

No	Subprojects/Activities (nationwide)	Potential environmental and
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		social impacts
1	Repair of damaged road infrastructure including, but not limited to: drainage systems, roads, bridges and transportation systems, energy and power supply, telecommunication, and other infrastructure damaged by a natural disaster event;	Increase dust, noise, vibration, water pollution, solid/hazardous/Toxic wastes, waste oil/fuels, public health and safety; possible use of asbestos-contaminated as construction materials and land acquisition;
2	Re-establish of the urban and rural damaged health facilities, schools, water supply and sanitation (including urban drainage);	Increase dust, noise, vibration, water pollution, Toxic wastes, waste oil/fuels, public health and safety; possible use of asbestos-contaminated as construction materials and land acquisition;
3	Repair of damaged public buildings, roads, restoration of damaged energy facilities, including schools, hospitals and administrative buildings;	Increase dust, noise, vibration, water pollution, solid/hazardous/ Toxic wastes, waste oil/fuels, public health and safety; possible use of asbestos-contaminated as construction materials and land acquisition
4	Repair, restoration, rehabilitation of schools, clinics, hospitals; roads, culverts, pavements, platforms, etc.	Increase dust, noise, vibration, water pollution, solid/hazardous/Toxic wastes, waste oil/fuels, public health and safety; possible use of asbestos-contaminated as construction materials and land acquisition;
5	Removal and disposal of debris associated with any eligible activity	Waste management and disposal
6	Disposal to medical wastes (at camp site, small clinic/hospitals), asbestos based materials, other toxic/hazardous wastes	Increase health risks, need management of medical waste, toxic materials, asbestos-contaminated debris
7	Temporary toilets, campsites for displaced communities due to cyclones, tropical storm, etc.	Hygiene, waste management

7.3.3 E&S Screening of CERC Subprojects

Once the CERC component is activated, ANE, IP in coordination with the Municipalities and the National Institute for Disaster Risk Reduction and Management (INGD) will undertake the following steps:

Step 1: Environmental and Social Screening Form under Annex 1 for the CRRN project will be used also for screening of the CERC subprojects. The same E&S Screening Process described under Section 7.2.1 will be followed.

As described under Section 7.2.1 there are two different outcomes of the Screening processes, based on the national legislation and the World Bank requirements, ESS1. The World Bank screening process is a Risk Classification (where not only type, nature, location, magnitude, etc., are considered but also the Borrower capacity and contextual risks). Under National regulation, there are Category C or B or A (or A+), whereas under the World Bank Risk Classification is there High, Substantial, Moderate and Low.

Step 2: Identification of Environmental and Social impacts and preparation of respective mitigation measures. Based on the results from Step 1, ANE, IP and the National Disaster Agency (INGD) will prepare an ESMP for the CERC activities highlighting the works/activities and mitigation measures to be conducted during detailed design, bidding/ contract, repair/restoration, and closure plans, taking into consideration the magnitude, scope, and nature of the emergency action being addressed. Consultation with local authorities and communities will be made during this stage. Should land acquisition be required, a resettlement plan will be prepared in close consultation with the provincial Directorate of Land and Environment (DPTA), and in consideration of the World Bank (WB) ESS5 and the required flexibility for the case of emergencies. Given that the CERC objective is to support immediate priority activities (no more than 18 months), the activities or subprojects with **significant** resettlement issues will be avoided. Budget and entities responsible for implementation of the environmental and social management plans (ESMP) and RAPs will be discussed and agreed as part of the plans.

Step 3: World Bank No Objection. The ESMP, RAP will be reviewed and cleared by WB (pre or post) and then submitted to DPTA for final approval.

Step 4: Implementation and M&E. The approved ESMP and RAP will be implemented according to the agreed implementation arrangement. The DPTA in coordination with ANE, IP will monitor and evaluate the implementation of the impacts' mitigation measures. Stakeholders' engagement will be required at this stage as an opportunity for gathering concerns and providing feedback to the community.

Step 5: Completion and Evaluation. At the completion of CERC, ANE, IP in coordination with INGD, will monitor and evaluate the results prior to contract closure. Any pending issues and/or grievance must be solved prior to the defect liability period.

7.3.4 Implementation Arrangements of CERC Subprojects

(To be validated & refined by ANE & WB)

The National Directorate for Monitoring and Evaluation of the Ministry of Finance (MEF) will be the IRM Coordination Authority, responsible for coordinating the implementation of the CERC crisis or emergency activities under the IRM, in close coordination with the RF/ANE, IP and MTC PIUs under the MOPHRH and MTC respectively.

The Coordination Authority is responsible for the following:

- Coordinating the selection of projects that will include IRM-CERCs in agreement with the World Bank;
- Coordinating the regular review and updating of both the selection of projects to include IRM-CERCs and the IRM-OM;

- Sending requests to access the IRM following a crisis or emergency and responding to requests from the Bank for information in relation to such requests through the MEF;
- Determining, in consultation with the World Bank, the amounts of funds to be reallocated to IRM-CERCs and to be withdrawn for emergency recovery purposes;
- Coordinating the process for handling withdrawal applications for IRM funds;
- Ensuring that the fiduciary and safeguards aspects of implementing the IRM emergency activities would be carried out adequately and reported regularly;
- Ensuring that personnel in sufficient numbers and with adequate capacity will be assigned to handle safeguards in a manner satisfactory to the Bank.

The Coordination Authority will work with the existing Project Implementation Unit (PIU) as the IRM Project Implementation Unit (IRM-PIU) to carry out emergency recovery and rehabilitation activities aligned with the recovery priorities established by the GoM. The Coordination Authority will ensure that this PIU is provided with adequate operation capacity (technical, financial management, procurement and safeguards) and supported by additional technical staff as needed. RF/ANE, IP will provide the overall coordination and monitoring and evaluation support in line with the implementation of CERC Subprojects.

In the Road Safety sector, the RF in the MTC will provide the oversight and coordination, monitoring and evaluation of the road safety sector response in coordination with other relevant Directorates. A Project Implementation Unit (PIU) under RF/ANE, IP will manage the emergency funds.

7.3.5 CERC Subprojects Activation

Activities under the CERC will not be carried out unless and until the following conditions have been met in respect of said activities:

- a. The Government has to determine that an Eligible Disaster Crisis or Emergency has occurred, and has to furnish to the World Bank a request supported by a Preliminary Assessment of Damage and Needs to activate the mechanism in order to respond to said Eligible Disaster Crisis or Emergency, and the World Bank has agreed with such determination, accepted said request and notified the GoM thereof.
- b. The GoM has sent to the World Bank a CERC Subproject that requires emergency funding, including a list of activities to be carried out for addressing the emergency response and recovery effort. The CERC Subproject will be prepared by the Coordination Authority (RF/ANE, IP) and agreed upon by the World Bank.
- c. The GoM has prepared and disclosed all safeguards instruments required for said activities, in accordance with the IRM Operations Manual, the World Bank has approved all such instruments, and the Government has implemented any required actions to be taken under said instruments.
- d. Retroactive financing may be allowed for goods procured in accordance with the procurement provisions specified in the IRM-OM up to one month prior to the IRM activation. These goods must be directly related to relief and recovery activities in response to the emergency or crisis that has been declared and approved in the Contingency Emergency Implementation Plan (CERIP).
- e. The Government shall not use the funds financed under the IRM for military or paramilitary or for any other purposes specifically excluded under the terms of financing.

The causal relationship between the Eligible Crisis or Emergency and the need to trigger the IRM in order to withdraw the proceeds from an IRM-CERC Project will be established by an official declaration of emergency situation caused by a disaster issued by the Cabinet of Ministers as stipulated by the Disaster Management Law (Law 15/2014); establishing that the declaration will be issued based on social and economic information of affected regions or districts and the National Warning System.

7.3.6 Disbursement

Disbursements under the identified CERC Subproject(s) will be contingent upon the fulfillment of the following conditions:

- i. The GoM has determined that an eligible crisis or an emergency has occurred, furnished the World Bank with the request and its supporting documents, and the WB has agreed and notified the GoM;
- ii. the World Bank has approved the CERIP furnished for the IRM activation request;
- iii. the GoM has prepared, adopted, and disclosed safeguards instruments required per the World Bank policies for all activities from the CERC eligible for financing under the IRM.

Disbursements are made based on the approved CERC Subproject(s) following the provisions of the World Bank Investment Project Financing (IPF) policy, paragraph 12, regarding “Projects in Situations of Urgent Need of Assistance or Capacity Constraints”; and are subject to evaluation, examination, and approval by the World Bank.

The IRM funds will be channeled through the CERC component of the CRRN project and will use the project designated account. Withdrawals of resources allocated to these CERC components will only be permitted for payment of expenses incurred in the context of the crisis and disaster emergency based on the CERC activity. The Coordination Authority through the MEF and IRM-CERC Project Implementation Unit will be responsible for the procedures for requesting disbursements of funds.

Environmental and social risks associated with the project will be managed by ANE, IP through guidance provided in this Environmental and Social Management Framework (ESMF) alongside the following instruments, as appropriate for the project and Mozambique country circumstances: Stakeholder Engagement Plan (SEP) (Separate document and described under Section 8.1), Labor Management Procedures (LMP) (Separate document and described under Section 8.2), Grievance Redress Mechanism (GRM) (Section 8.3), GBVSEA/SH Action Plan (Section 8.4 for Introduction, Annex 8 for the Action Plan Matrix, and Separate detailed report), Chance Finds Procedure (Section 8.5), Security Risk Assessment (SRA) (separate document), and Security Management Plan (SMP) (separate document).

8.1 Stakeholder Engagement Plan

A Stakeholder Engagement Plan (SEP) has been prepared to guide stakeholder engagement during project preparation and throughout implementation, and it is in accordance with the World Bank's Environmental and Social Standard 10 (ESS10). It also seeks to ensure that the views, concerns, and interests of project stakeholders, including local communities, are considered during project preparation and implementation. Please refer to ESMF Volume 2 Appendix 1 for the said SEP for details. Chapter 6 has provided a summary of stakeholder consultations undertaken as part preparation of the ESMF.

The Stakeholders Engagement Plan (SEP) define the program for stakeholder engagement, including public information disclosure and consultation throughout the entire project cycle. It outlines ways in which the project team will communicate with stakeholders and includes a mechanism by which people can raise concerns, provide feedback, or make complaints about project activities or any activities related to the project. The project will apply the following principles during its for-stakeholder consultation: openness and life cycle approach; informed participation and feedback; inclusiveness and sensitivity; special attention must be given to vulnerable groups; commitment; integrity; respect; transparency; trust; and ethical considerations.

The stakeholder engagement started with scoping meetings with different stakeholders institutionally at central (Maputo) and provincial levels. Focus group discussions, in-depth interviews, and informal discussions with PAPs should be used for stakeholder consultation meetings. Consultations should form an integral part of the environmental and social project instruments. To effectively conduct consultations with the identified stakeholders, including local communities, government entities, international organizations, civil society organizations, and affected individuals, various consultation methods are to be employed namely the following:

- *Formal meetings*: presentation of project information to the PAPs, with a view to capturing opinions, as well as building an in-depth and impersonal relationship with the PAPs.
- *Public consultations*: presentation of Project information to a large group of PAPs, especially directly affected communities, allowing the group to provide views on aspects of the project of concern.
- *Stakeholder group*: Specific stakeholder groups, such as women, young girls, youth, and men.
- Preparation and distribution of leaflets about the project: Leaflets with brief and specific information about the Project will be prepared and distributed to the stakeholders.

- *Media*: Local media such as national television, national radio, and local community radio, posters, billboards, among others will constitute another avenue for disclosure of information about the project.
- *Use of electronic correspondence and telephone communication*: This avenue will serve to distribute information to public servants/officials and relevant provincial governments, NGOs, relevant organizations/agencies all about the project.

The stakeholder's identification is a critical component of the SEP. Identification and analysis of stakeholders will help the National Roads Administration, Public Institute (ANE, IP) to know the key stakeholders, their location, their interests and issues, levels of influence, what motivates them and what they are looking for in relationship to the project activities. The categorization of stakeholders according to how they will be affected (directly or indirectly) by the implementation of the project; level of intervention and influence on project implementation, has been made and it is detailed in section 2.3.2 of the SEP.

Different levels of stakeholders are identified and includes the Interested Institutions Local Government; Non-Governmental Organizations; Local Communities; and Disadvantaged/Vulnerable Individuals or Groups.

The strategy for consultation process, disseminating information and public participation within the scope of the SEP has the following main objectives: (i) Allow understanding of the needs of direct and indirectly project affected people; (ii) Ensure coordination between all those involved in the implementation, government authority structures at their different levels relating to the PAPs; (iii) Allow and guarantee the reception of feedback and comments from PAPs, as well as reception of complaints and suggestions regarding the design and implementation of the project; and (iv) Ensure transparent service delivery by the parties involved in the implementation of the Climate Resilient Roads for the North Project (CRRNP), including the management of information received whose responses can be taken back to the PAPs to allow adjustments to interventions throughout the CRRNP life cycle.

The SEP will support the implementation of the Project's Environmental and Social Management Framework (ESMF), the design of site-specific instruments (ESIA/ESMP) and guide the stakeholder engagement process. The Project should recruit and maintain a Social Specialist with communication skills who will lead the implementation of the SEP and be responsible for all aspects related to engagement with PAPs.

ANE-IP and other relevant institutions for project implementation will oversee the stakeholder engagement activities. The budget for the SEP is \$390.000 for the entire period of project implementation and will be updated throughout the life cycle of the project, depending on the development of the social activities. Details of the budget are presented in section 4.1 of the SEP. The budget should be included in component 3 (Institutional Strengthening and Project Management) of the project.

8.2 Labour Management Procedures

The Labor Management Procedure has been developed to set the way in which project workers will be managed in accordance with the requirements of Mozambique Labor and Employment Laws and World Bank's Environmental and Social Standard 2 (ESS2) –Labor and Working Conditions. The Labor

Management Procedures (LMP) apply to project workers including full-time, part-time, and temporary workers, etc. The LMP is applicable, per ESS2 to the project in the following manner:

- a. people employed or engaged directly by the Government (including the project proponent/ANE, IP and the project implementing agencies) to work specifically in relation to the project (*direct workers*);
- b. People employed or engaged through third parties to perform work related to core functions of the project, regardless of location (*contracted workers*). 'Third parties may include contractors, sub-contractors, brokers, agents or intermediaries;
- c. People employed or engaged to provide community labor (*community workers*) as that term is identified in paragraphs 34-38 of ESS2; and
- d. people employed or engaged by Government's primary suppliers (*primary supply workers*) – are those suppliers who, on an ongoing basis, provide directly to the project goods or materials essential for the core functions of the project identified in paragraphs 39-42 of ESS2.

The Labor Management Procedure (LMP) has been developed to manage labor risks during the implementation of the CRRN project." It is recommended that the key aspects of the LMP including those of other E&S instruments, shall be incorporated in the bidding documents and contracts for implementation. Details of LMP are in (Annex 9).

8.3 Grievance Redress Mechanism for the Project

This Section provides guidance on the operation of a Grievance Redress Mechanism, also covered under the Project's Stakeholder Engagement Plan (SEP) prepared as an Appendix to this ESMF (*Please refer to ESMF Volume 2 Appendix 1 for details*). Handling of environmental and social complaints for projects classified as Substantial risks, ANE, IP is required at the minimum, to set up a grievance redress mechanism while ensuring their functionality. This system will be widely publicized, in Portuguese and local languages/ dialects and forms, and be easily accessible to potentially affected people. To the extent possible, a subproject-level grievance redress mechanism will also work in conjunction with WB's own environmental and social complaints mechanism, the Grievance Redress Service (GRS). WB will systematically and in real time be kept informed of the functioning of the mechanism and, for each complaint, be updated on the status of the resolutions. Periodic reports are expected to mention the activity results of the client's grievance redress mechanism.

Grievance redress mechanisms provide a way to provide an effective avenue for expressing concerns and achieving remedies for communities, promote a mutually constructive relationship and enhance the achievement of project development objectives. It provides a platform for communities and individuals who believe that they are adversely affected by a WB supported project may submit complaints to existing project-level grievance redress mechanisms. Grievance redress mechanisms are increasingly important for development projects where ongoing risks or adverse impacts are anticipated. They serve to prevent and address community concerns, reduce risk, and assist larger processes that create positive social change. It has been learned from many years of experience that open dialogue and collaborative grievance resolution simply represent good business practice both in managing for social and environmental risk and in furthering project and community development objectives. The project will therefore operate Project Based GRM, briefly explained below.

Types of complaints that may arise as a result of project implementation were identified. Such types of complaints include: (i) interference with cultivated land and crops, due to construction works and rehabilitation of roads and bridges; (ii) physical damage and nuisance due to construction and/or operational activities of the project; (iii) road accidents involving vehicles and machines used for the project's construction works; (v) noise and vibration, and consequences on properties and the health of communities in the vicinity of the project's intervention areas; (vi) obstruction of access as a result of construction works related to the project; (vii) gender-based violence involving project workers from the Contractor staff.

The complaints management process should be based on the following key principles:

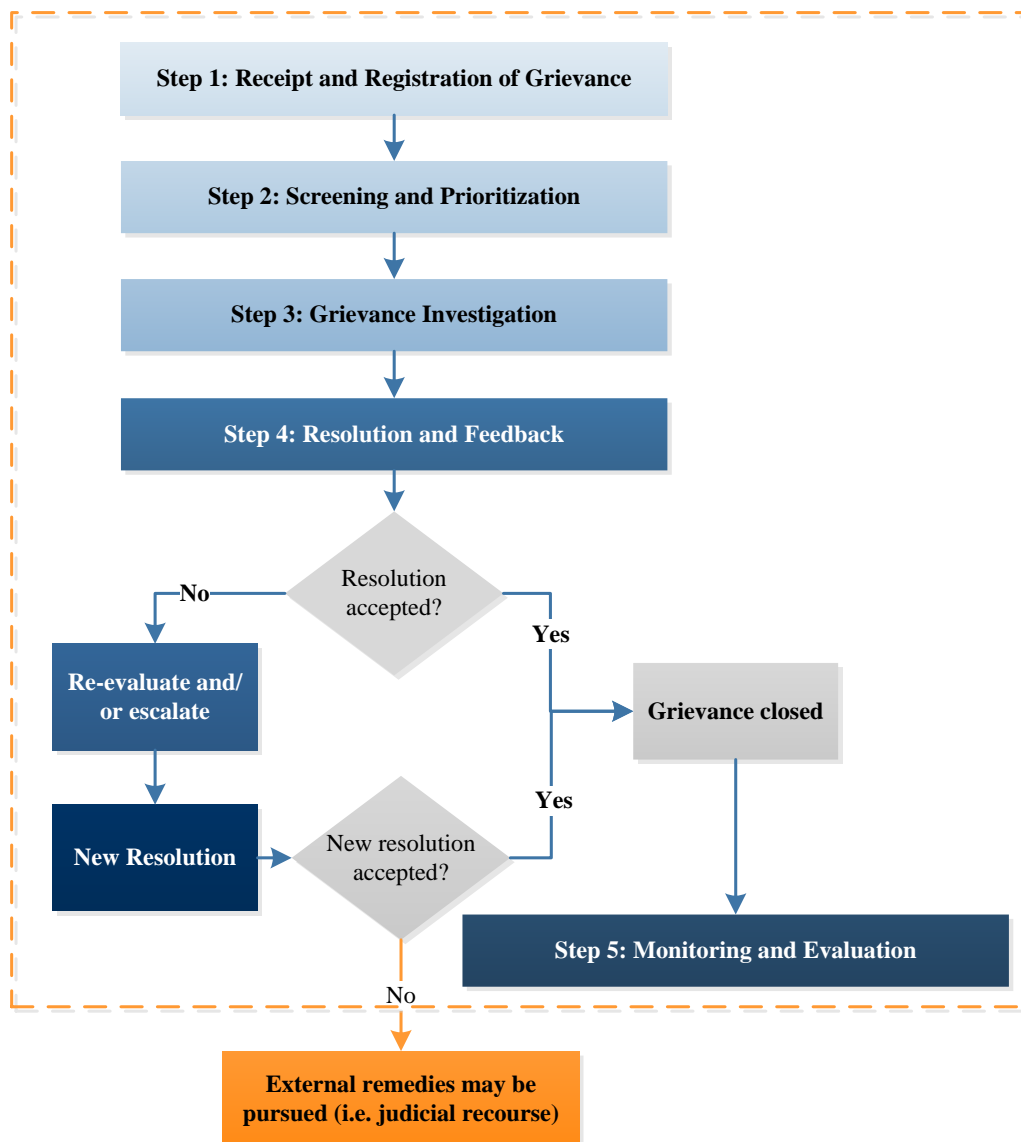
- a. *Transparency and justice*: The process for resolving grievances and complaints should be transparent, considering local social and cultural aspects, such as the local language. The GRM should allow access to judicial or administrative resources for all PAPs.
- b. *Accessibility and culturally appropriate*: All PAPs should have access to the GRM and its respective procedures and communication channels. Any individual or group that is direct or indirectly affected by the Project's activities, as well as those who may have an interest in the Project or the ability to influence its outcome, positive or negatively, should have access submitting complaints.
- c. *Social and participatory inclusion*: PAPs, vulnerable groups, members of associations and civil society are encouraged to take complaints and comments to the project management. Special attention must be paid to ensure that disadvantaged people, marginalized groups, including those with special needs, have access to this MRR.
- d. *Openness and regularity of communication*: Existence of channels for individuals and groups to choose their preferred method of presenting complaints. Communication channels should be kept open throughout the entire process of resolving each complaint and for a maximum period of 6 months after the situation has been resolved. And later archived.
- e. *Written records*: All complaints should be recorded on the complaints form and tracked until final resolution.
- f. *Dialogue and site visits*: All complaints should be considered to warrant discussions with the complainant and a visit to the location where the problem occurs to verify the veracity and seriousness of the complaint, if appropriate, to obtain a first-hand understanding of the nature of the restlessness.
- g. *Timely response and proportionality*: All complaints, whether simple or complex, should be handled and resolved as quickly as possible. The action taken on the complaint, or suggestion should be quick, decisive, and constructive.
- h. *Feedback to complainant*: Feedback received by the grievance process date must be incorporated into the project and must be reported to the complaints.

In summary and consistent with international standards, the GRM includes the following five-step procedure:

- Step 1: Receipt and Registration
- Step 2: Classification and Prioritization
- Step 3: Investigation
- Step 4: Resolution and Feedback

- Step 5: Monitoring and Evaluation

Figure 8-1: The Process Flow Chart of Grievance Redress Mechanism (GRM)



World Bank Grievance Redress Service

WB has set up its own environmental and social complaints mechanism, the GRS, which is open to third parties. This mechanism aims to ensure an independent handling of complaints about the environmental and social impacts induced by WB-funded projects. A complaint may be submitted to this mechanism by anyone affected by a WB-funded project.

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures.

Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org

8.4 GBV Risk Assessment and SEA/SH Prevention and Response Action Plan

The GBV/SEA/SH Risk Assessment and Response Action Plan is a critical component of the Climate Resilient Roads for the North Project in Mozambique, aiming to enhance road connectivity with a special focus on climate resilience and gender inclusivity. It complements the broader Environmental and Social Management Framework (ESMF) and upholds the World Bank's guidelines to mitigate risks in substantial civil works projects. Engaging a wide range of stakeholders, this plan undertakes a systematic evaluation of the socio-economic, cultural, and political contexts. It identifies gender disparities and GBV risks, collaborates with stakeholders to assess impacts, and devises a risk matrix to prioritize interventions. The risk assessment highlights the increased vulnerability to GBV in the provinces of Cabo Delgado, Niassa, and Nampula, attributing this to conflict, displacement, and socio-economic hardships. It examines how traditional gender roles, economic dependence, and climate-induced displacement contribute to GBV prevalence. Despite a comprehensive legal GBV framework, service delivery is challenged by conflict, cultural barriers, and logistical issues.

A holistic action plan advocates for a coordinated approach, merging formal, mobile, and informal services, emphasizing community engagement, and adjusting to each province's distinct challenges. A detailed Grievance Mechanism (GM) aims to handle GBV in conflict-affected zones, categorizing stakeholders by their GBV influence and interest. The GM follows a survivor-centric methodology, prioritizing survivors' rights, needs, and preferences. It details a reporting and management process for GBV cases to ensure safety, confidentiality, and respect for survivors. This includes training locals to report GBV, setting up mobile reporting units, employing local radio for awareness, and establishing confidential reporting environments. Recommended reporting channels comprise helplines, grievance boxes, and community representatives. The document also discusses organizations in Nampula that disseminate laws on family and domestic violence, foster gender discourse.

The report includes a code of conduct underscores adherence to national and international laws protecting displaced populations, detailing behaviors that constitute SEA/SH and committing to their prohibition and penalization. It outlines reporting procedures, endorses non-retaliation, and specifies security personnel's duties, emphasizing human rights. The Risk Response Action Plan pinpoints project-related risks, from insecure temporary housing to the potential for GBV in the wake of displacement and armed security presence. Measures like secure housing, social norm adherence, counselling, legal aid, anti-harassment policies, and community watch programs are stipulated. It provides indicators for measuring these measures' effectiveness, assigning responsible parties, setting timelines, and estimating budgets, aiming for a structured response to potential risks, ensuring safety, and maintaining ethical standards throughout the project.

To refine GBV risk management, the plan suggests enhancing specialized GBV services, particularly in emergency and conflict-impacted areas, deploying mobile GBV service units, establishing safe shelters, and expanding community leader capacity building. It emphasizes the importance of survivor-centered GBV services, legal aid provision, awareness campaign execution, involving men in

prevention, training project staff, and instituting confidential grievance mechanisms. A collaborative and well-monitored response, including regular data collection and analysis, is recommended to continually inform strategies. This comprehensive document underscores the need for effective GBV risk mitigation and the complexity this entails due to socio-economic, cultural, and conflict-related challenges, as well as the dearth of specialized GBV services and limited support from community leaders. It proposes using diverse information dissemination channels like local radio, social media, and community gatherings, partnering with local NGOs and religious entities, and organizing extensive campaigns and forums to increase GBV awareness. The document advocates creating safe spaces for at-risk populations and improving access to legal aid, calling for a coordinated response and enhanced service delivery to effectively tackle GBV in project locations.

8.5 Chance Finds Procedure

Cultural heritage encompasses tangible and intangible heritage which may be recognized and valued at a local, regional, national, or global level. Tangible cultural heritage, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be located anywhere and may be above or below land or under the water. Intangible cultural heritage, which includes practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artefacts, and cultural spaces associated therewith— that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history.

If during construction, sites, resources, or artifacts of cultural value are found, the following procedures for identification, protection from theft, and treatment of discovered artefacts should be followed and included in standard bidding documents. These procedures consider requirements related to Chance Finding under the national Law No. 10/88 of December 22, Law on the Protection of Cultural Heritage, and the Regulation for the Protection of Archaeological Heritage (Decree nº 27/94, of 20 July).

If a cultural object/artefact is unexpectedly found, the following procedures should be followed:

- Stop the construction activities in the area of chance find temporarily.
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a guard shall be arranged until the responsible local authorities take over. These authorities are the Ministry of Culture and Tourism, which must be communicated within 48 hours through the local authority.
- The National Directorate of Cultural Heritage is responsible for designating, within a period not exceeding thirty days after receiving notification, an inspector to supervise the protection measures and prepare a report, within a maximum of 60 days after notification, with an opinion on the importance and content of discovered elements and proposal of the most advisable measures, carried out after prospecting or excavations.
- If the National Directorate of Cultural Heritage determines that chance find is a non-cultural heritage chance find, the construction process can resume.

If the National Directorate of Cultural Heritage determines chance find is an isolated chance find, the National Directorate of Cultural Heritage would provide technical supports/advice on chance find treatment with related expenditure on the treatment provided by the entity report the chance find.

8.6 Security Risk Assessment and Security Management Plan

With the purpose of addressing potential risks in the project to be implemented, the Security Management Plan has been developed to handle risks with consequences on people, assets, infrastructure, and operations. The Security Management Plan was developed based on the Security Risk Assessment for the project and describes how and by whom security will be managed and implemented. Considering the security situation in the country in general and particularly in the northern region, where there have been witnessing the phenomenon of violent attacks and their consequences since 2017, there arose the need to conduct a Security Risk Assessment for the area to be covered by the project, namely the provinces of Cabo Delgado, Niassa, and Nampula. In this context and aiming to determine the necessary security level for the project, the Security Risk Assessment was carried out, considering the districts covered by the project, which served as the foundation for this Security Management Plan. For the identified risks, the plan defined the treatment that is deemed most appropriate based on ISO 31000:2018. (Risk Management) through the principles, framework, and process, Mozambican legislation, International Humanitarian Law, World Bank Environmental and Social Standards (ESS 2 and 4), the Voluntary Principles on Security and Human Rights (VPSHR), and the International Code of Conduct for private security companies. To ensure the effectiveness and acceptance of the security plan, engagement with stakeholders, guideline was defined for Stakeholder Engagement Plan (SEP). A mechanism to receive and process complaints in a timely manner, with special attention to vulnerable groups, were defined Project Grievance Redress Mechanism, that will be implemented through the installation of green lines. In terms of the security governance, were defined:

- Responsible at the Strategic and Implementation level.
- Security Structure.
- Security Priorities, Roles, and Responsibilities.

Considering that, incident reports and security incident analysis are extremely critical for management decisions, were defined Security Incident Report (SIR) document structure to report incident that impact people and loss incident.

This SMP, also defined some Operation Security Procedures (OSP) such as:

- Project Perimeter Security Control.
- Storage and Control of Materials.
- Information and Communication – Categorization, Treatment, and Control of Sensitive Information.
- Protection of people; and
- Emergency response exercises and report structure document.

Throughout the project lifecycle, the SMP were defined five security gateways. Each security gateway, the PIU Project Manager, in consultation with the PIU Security Risk Management Specialist or other personal responsible of security issues, must provide authorization for the Project to progress in certain circumstances.

In accordance with the International Good Practices (IGP), the SMP defined Partners Security Requirements, Security Partners in CRRNP Project and Weekly Security CoP, PIU Travel Policy, and Crisis Management Plan.

8.7 Reporting of Incidents and Accidents during Project Implementation

The respective Project implementers, Contractors, Supervision Consultants and Service Providers will report all the environmental and social incidences/ accidents to the ANE, IP regularly for submission to World Bank in accordance with the World Bank Environmental and Social Incident Reporting Tool Kit (ESIRT, March 2023). ANE, IP shall within 24/ 48 hours of occurrence promptly notify WB of Serious/ Severe (based on the categorization provided below) Environmental, Social, Health and Safety (ESHS) incidents or accidents related to the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers *including* child abuse, gender-based violence, Sexual Exploitation and Abuse, fatality, hazardous spills, etc. Indicative and minor incidences will be reported to the World Bank through incidental, monthly and quarterly reports – showing the number of both the cumulative and the reporting period incidents. The reports shall provide sufficient detail regarding the incident or accident, indicating immediate measures taken or that are planned to be taken to address it, and any information provided by any contractor and supervising entity, as appropriate. Within fifteen days after the incident/accident, in consultation with WB, ANE, IP in close collaboration with the respective statutory Authorities (Police, INATRO, etc) shall undertake a Root-cause analysis (RCA) and develop a Safeguards Corrective Action Plan (SCAP) to be shared with WB, and this will include measures to prevent its reoccurrence, including actions, responsibilities and timelines for implementation, and monitoring program. The RCA shall be based on existing country processes, where available. Such incidence reporting (major and minor) will be included in relevant financing/Grant agreements with Project beneficiaries.

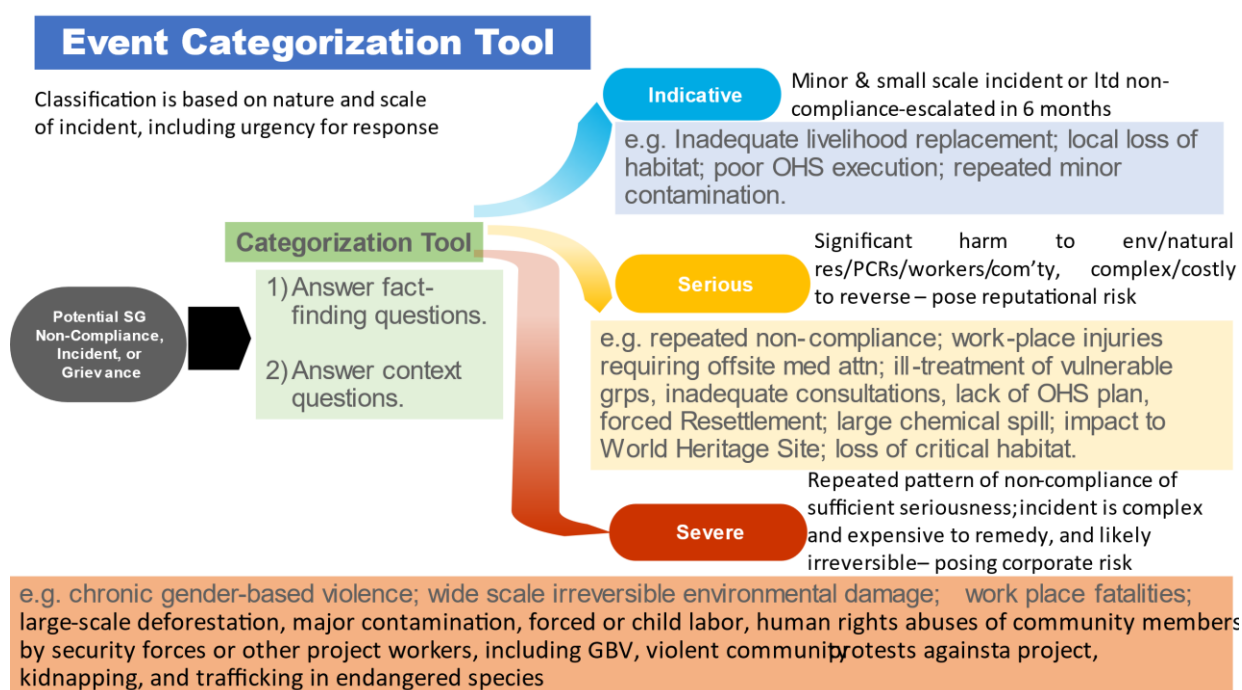


Figure 8-2: Incidents/ Accidents Categorization under World Bank, ESIRT (2023).

Initial Communication within 24/48 hrs of incident should contain the following information:

An initial communication may take the form of an email, letter, social media, telephone call, conversation, or direct observation. It may come through a communication from the Contractor to Supervision Consultants (RE), then to ANE, IP for onward transmission to the World Bank. Incidents may also be reported to the Bank through the Bank's Grievance Redress Service (GRS)¹⁵, from a third party, or be discovered during implementation support/supervision missions.

- What was the incident? What happened? To what or to whom?
- Where and when did the incident occur?
- What is the information source? How did you find out about it?
- Are the basic facts of the event clear and uncontested, or are there conflicting versions?
- What were the conditions or circumstances under which the incident occurred?
- Is the event still ongoing or is it contained?
- Is loss of life or severe harm involved?
- What measures have been or are being implemented? By who?
- Has the Government been informed? What is their response (if any yet)?

The following Incident Form shall be completed by the Contractor and sent to ANE, IP through the Resident Engineer:

FOR BANK AND BORROWER USE

Part B: To be completed by Borrower within 24 hours

B1: Incident Details			
Date of Incident:	Time:	Date Reported to PIU:	Date Reported to WB:
Reported to PIU by:	Reported to WB by:	Notification Type: Email/phone call/media notice/other	
Full Name of Main Contractor:		Full Name of Subcontractor:	

B2: Type of incident (please check all that apply) ¹
Fatality <input type="checkbox"/> Lost Time Injury <input type="checkbox"/> Displacement Without Due Process <input type="checkbox"/> Child Labor <input type="checkbox"/> Acts of Violence/Protest <input type="checkbox"/> Disease Outbreaks <input type="checkbox"/> Forced Labor <input type="checkbox"/> Unexpected impacts on heritage resources <input type="checkbox"/> Unexpected impacts on biodiversity resources <input type="checkbox"/> Environmental pollution incident <input type="checkbox"/> Dam failure <input type="checkbox"/> Other <input type="checkbox"/>
<small>See Annex for definitions</small>

B3: Description/Narrative of Incident
<i>For example:</i> <ol style="list-style-type: none"> I. What is the incident? II. What were the conditions or circumstances under which the incident occurred (if known)? III. Are the basic facts of the incident clear and uncontested, or are there conflicting versions? What are those versions? IV. Is the incident still ongoing or is it contained? V. Have any relevant authorities been informed?

B4: Actions taken to contain the incident			
Short Description of Action	Responsible Party	Expected Date	Status

For incidents involving a contractor: Have the works been suspended under Contract GCC8.9? Yes <input type="checkbox"/> ; No <input type="checkbox"/> ; Name of Contractor:
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B5: What support has been provided to affected people

Figure 8-3: Incidents/ Accidents Categorization under World Bank, ESIRT (March 2023).

8.8 Managing Risks and Impacts of Corona Virus Disease (COVID-19)

Since the COVID-19 infections are reported to keep reoccurring in some countries World-wide, the project thought it imperative to include guidance on managing risks and impacts associated with the disease.

During implementation of the project, there is need to be cognizant of COVID-19 pandemic though the disease is not as serious as it was in 2020-2021. The World Health Organization declared COVID-19 a global pandemic after assessing both its alarming levels of spread and severity, and the alarming levels of inaction. Consequentially, WHO issued various measures to prevent the spread of the virus, and these measures have been adopted worldwide. In Mozambique, Ministry of Health has adopted most of the WHO measures and continues to give regular updates and guidance, including popularizing and encouraging people to practice regular hand-sanitization/hygiene, social distancing guidelines, wearing nose masks, among other Standard Operating Procedures. The project will continue to follow guidance issued by MoH. At the bare minimum, the following measures shall be ensured:

- a. observance of social distance as guided by MoH, non-shaking of hands, regular use of hand-sanitizers and washing hands with soap, wearing of face masks while in public, use of temperature guns to screen project participants during project events that bring participants together, reporting protocol of any likely infection of persons, regular training of communities and leaders on COVID-19 control measures; etc.
- b. Provision of appropriate Personal Protective Equipment (PPE) to all project workers and visitors;
- c. When necessary, adopt electronic means of consulting stakeholders, whenever possible. At community Level stakeholders, telephone communication and local FM Radio Stations is encouraged;
- d. Upon guidance by MoH and in case of major resurgence, the project shall adopt rapid testing of workers for covid-19 on a regular basis and depending on the prevailing conditions.

ANE, IP will closely work with the respective Provincial Authorities and communities to continue operations while complying with health and safety directives by the government of Mozambique.

8.9 Integration of Environmental and Social Aspects into the Procurement Process

During the project implementation phase, it is important to ensure integration of E&S aspects into the procurement processes, without which, implementation of the required mitigation measures will be curtailed. Procurement for works usually commences after the completion of the preparation of Engineering Designs and respective Environmental and Social Assessments for individual subprojects. The following key action points are recommended to be followed to ensure integration of E&S aspects into the procurement processes:

Bidding

During the bidding process, the Contractor will be expected to include a brief methodology of the implementation of the relevant environmental and social safeguards and attach a cost of implementation of these plans to his proposal bid. In addition, the Contractor will have to provide relevant staff for the implementation of E&S management including an Environmental Specialist, Health and Safety Specialist, Social Specialist, and Community Liaison Officers. Lastly, the contractor must prove prior experience in adequately managing safeguards issues in the road sector.

The key aspects to be included in the contracts for civil works are highlighted below:

Bill of Quantities

The bill of quantities (BoQs) must capture all relevant safeguards aspects. These should include safeguards staffing, documentation (requirement to prepare Contractor's Environmental and Social Management Plan CESMP, etc.), waste management, HIV/AIDS, grievance redress, gender awareness, site clean-up and landscaping, monthly ESMP reporting among others. Laxity in the provision and use of personal protective equipment is a risk to the safety of workers. The BoQs should provide a sum for PPE and supervision be done to ensure that all workers undertake works while in full PPE.

E&S Management Clauses

As a best practice, the contracts for civil works should include clauses on management of environmental and social aspects. Sometimes, the clauses are weak and cannot be used to hold the contractors accountable. There is a need to strengthen the clauses and to tailor them to the specific project E&S safeguards aspects and management needs. A sample list of E&S Specifications for Contractors is provided under Annex 4 of this ESMF.

Staffing

It is common for contractors to recruit unqualified safeguards staff or to assign safeguards duties to site foremen or clerks of works with no prior safeguards experience. Staffing requirements should be spelt out in the contracts. In addition, it may be useful to include the minimum requirements in the contracts for civil works. Therefore, ANE, IP through the supervising consultants must approve the contractor's key E&S staff, namely: Environmental Officer, Health and Safety Officer and the Sociologist.

Contractor's ESMP and Monitoring

The Contractor shall be required to prepare a Contractor's ESMP (C-ESMP) based on the Project's ESMP. The ESIA's should clearly spell out what should be contained in the Contractor's ESMP based on the site-specific E&S conditions and the respective E&S management/ implementation sub-plans.

Laxity in implementation and reporting on safeguards issues is common amongst contractors largely because they do not take safeguards issues seriously. This can be addressed by requiring contractors to prepare monthly environmental and social monitoring reports. These should either be pay items and clearly included in the BoQs or a condition for certification and payment approvals. Contractor safeguards reports are usually characterized by failure to include useful monitoring indicators such as safety statistics (fatalities, minor injuries, near misses, etc.), number of trees cut, and number replanted amongst others. The contractors will require training in safeguards monitoring and reporting. The contractors need to undertake proper recordkeeping of all safeguards' activities. The contractors should liaise with Provincial and District technical E&S offices to ensure proper monitoring and timely implementation of project activities.

Decommissioning and Restoration of Disturbed Areas

At the end of the construction period, the Contractor must ensure restoration of all disturbed areas including materials sites through proper landscaping, backfilling, and restoring topsoil, (re-

) introduction of genetic species (e.g. natural re-grassing) similar to those destroyed in order to re-establish the natural local ecology. The final payment must be tagged to successful restoration activities, verified, and approved by ANE, IP in collaboration with MTA, where necessary.

9.1 Introduction

To be validated and refined by ANE & WB

This section includes the description of the institutional framework, namely, relevant government bodies and authorities with power and jurisdiction over the project.

RF/ANE, IP and MTC are the main implementing agencies for the CRRN Project and will be working in close cooperation with several key implementing partners, including the Ministry of Public Works, Housing and Water Resources (MPWHWR), Ministry of Health, Traffic Police and any other Project Beneficiaries. Other institutions that will be directly involved in the implementation of CRRN Project may include Ministry of Land and Environment (MTA), Provincial Directorates of Land and Environment (DPTA), Environmental National Directorate (DINAB) and National Administration of Conservation Areas (ANAC) among others.

9.2 Project Implementation Arrangements

The implementing entity under the proposed project will be the Road Fund under the Ministry of Public Works, Housing and Water Resources (MPWHWR). To facilitate project implementation and allocation of responsibilities, the Road Fund will enter into legally binding and enforceable cooperation agreements with ANE, IP and any institutional beneficiaries of the project. The project will host a Project Implementation Unit (PIU) at ANE, IP to facilitate day-to-day project implementation. The MPWHWR will provide overall coordination for the project. The Road Fund will be responsible for implementation, coordination with ANE, IP, budgeting, monitoring, financial management, and auditing of project resources. ANE, IP will oversee execution of the works, including procurement, E&S standards, and management of the engineering aspects. Given the overstretched E&S capacity, . An assessment of ANE's capacity to manage E&S risks in FCV environment (Cabo Delgado) was undertaken during preparation of the project E&S instruments, aiming to ensure capacity strengthening at an institutional level and improved E&S risk management during the operational phase. While ANE's E&S unit has been recently expanded, it still consists of limited and geographically fragmented resources, particularly at the provincial level. Given the above, it is recommended that ANE, IP establishes a PIU for this project, comprised of among others the following E&S staff: Environmental Specialist, Health and Safety Specialist, and Social Development Specialist. ANE, IP will supplement their capacity for managing E&S risks in this project through use of an Owner's Engineers and Contractor/s who have minimum E&S staffing of Environmental Specialist, Health and Safety Specialist, and Social Development Specialist. Comprehensive support to ANE, IP for institutional capacity at all levels is included in the ESCP, building off ongoing support provided.

Other institutions that will be directly involved in the implementation of CRRN Project may include Ministry of Land and Environment (MTA), Provincial Directorates of Land and Environment (DPTA), Environmental National Directorate (DINAB) and National Administration of Conservation Areas (ANAC) among others. Each of these categories will require responsive capacity enhancement in environmental and social management based largely on their levels of involvement in CRRN project activities. In addition, CRRN project may request national and international university departments to provide support in capacity building or providing mentoring.

The successful implementation, monitoring, and reporting of E&S instruments at the subproject level will rely on the provincial and district level E&S safeguard officers of the above institutions, including the district Environmental and Social Officers. However, to do so, a capacity building initiative for these institutions at the local level is important.

ANE,IP together with other relevant entities (DPTA, PROSIR, etc.) will monitor the resettlement plan preparation (if necessary) and implementation for the construction phase. At the procurement process level, the ANE,IP E&S team must ensure that Environmental and Social clauses are in all Bidding documents, including Penalties for recurrent non-compliance.

The Supervising Engineer also must be familiar with the content of the C-ESMP prepared for each subproject based on the guidelines given in the ESMF (and generic ESIA/ESMP) and monitor the contractor's compliance with the environmental and social (ES) safeguards using their own appropriately qualified and experienced ES Safeguards specialists.

The contractor must implement, manage, and maintain the C-ESMP for the duration of the contract using their own appropriately qualified and experienced ES Safeguards specialists as well. Appropriate resources, budgets, equipment, personnel and training must be allocated for the effective control and management of the environmental and social risks associated with the construction. Failure of the contractor to implement the safeguard instruments will result in fines and penalties applied within their contract, as specified in the bidding process and implemented through procurement.

Project Steering Committee –The Government will establish an inter-ministerial Project Steering Committee responsible for strategic decision making and monitoring overall project implementation. The committee will comprise nominees of the MOPHRH, RF, ANE, IP, Ministry of Economy and Finance, the Ministry of Land, Environment, MTC, INATRO, and the provincial governors. The Project Steering Committee will meet twice a year, or quarterly, if necessary, in the respective project areas to monitor Project progress. These meetings will be chaired by Directors of the implementing agencies and PIU members take part as resource persons or perform the role of Secretariat.

High-Level Road Safety Council - For the purposes of supporting the program's objective related to road safety, the Government will establish a High-Level Road Safety Council. This council will be chaired by the Prime Minister of the Republic of Mozambique and will include high level representatives from the MOPHRH, MTC, MoH, Ministry of Interior, Traffic Police, RF, ANE, IP, INATRO, and other road safety stakeholders. INATRO will act as the Secretariat of the High-Level Road Safety Council.

The PIUs will be responsible for project coordination and implementation, with full E&S safeguards responsibility for all activities of the project. The PIUs will include at least a Project Manager/Coordinator, Environmental and Social specialist, a Procurement Specialist, a Financial Management Specialist, Monitoring and Evaluation (M&E) Specialist, as well as appropriate technical specialists, including Fund Manager and support staff.

9.3 Institutional Mandates of Executing Agencies

Ministry of Public Works, Housing and Water Resources (MOPHRH)

The MOPHRH is the central body of the state that ensures the fulfilment of the Government's missions in the areas of public works, building materials, roads and bridges, urbanization, housing, water resources, water supply and sanitation. In the area of roads and bridges, the MOPHRH is responsible for:

- Proposing and implementing the road and bridge policy.
- Managing the public road and bridge network.
- Ensuring the balanced development, unity and complementarity of the national road network.
- Promoting the integration, participation, and training of public and private agents in the planning, development, financing, and management of roads and bridges.
- Promoting public-private partnerships in the construction, maintenance, and conservation of roads and bridges.
- Regulate the use of the national road and bridge network as well as their partial protection zones.
- Update the register and classification of roads.
- Establish regulations and standards in the field of operations and maintenance of roads and bridges. The MOPHRH also oversees works of other agencies relevant for the project such as the National Road Fund (RF) and the National Road Administration (ANE).

Road Fund (RF)

RF was established as a coordinating agency responsible for raising and managing funds for promotion of safer road network in Mozambique. The funds raised are used for:

- Regular roads maintenance.
- Bridges maintenance.
- Roads rehabilitation.
- Roads improvement, and
- Roads safety.

National Roads Administration, Public Institute (ANE,IP)

The National Roads Administration, Public Institute (ANE,IP) is the operational agency responsible for maintenance, rehabilitation, and improvement of national (primary and secondary roads outside municipalities) roads and bridges projects to ensure safe, economic and sustainable connection and circulation of people, goods and services to contribute to economic, social and cultural development in the country.

Ministry of Transport and Communication (MTC)

The MTC is responsible for facilitating and supporting all matters related to all modes of transport and administration of pipeline and port facilities and communications in Mozambique. The roles and functions of the MTC are as follows:

- Development of transport to meet the needs of the population circulation and production flow in a coordinated manner;
- Transport park planning;
- Transport planning including with neighboring countries;
- Accident prevention;
- Safety in all means of transport;
- Organization of postal and telecommunication services and increase of existing networks, with priority for the national network.

National Road Transport Institute (INATRO)

The National Road Transport Institute (INATRO) is another Government institution established to promote Road Safety in Mozambique. It is responsible for vehicle inspections, driver licensing and post-crash response to ensure safety of all road users such as drivers for both motorized and non-motorized vehicles, and pedestrians. It is also responsible for carrying out road safety sensitization and awareness raising campaigns to the general public. INATRO works together with the Ministry of Education and international agencies (e.g., World Health Organization) and private companies that sponsor Information, Education and Communication (IEC) materials to train and raise awareness with school children and local communities on safe road crossing, particularly those attending primary schools close to, or on the N1 road.

The Traffic Police also assist in traffic management to assist children crossing the road when school begins and ends for the day. INATRO also works with a local NGO, AMVIRO, which works with the victims of road accidents, to raise awareness countrywide about road safety issues. INATRO have been running campaigns with the traffic police to implement speed management and control and check driver licenses, with good results. They have a campaign to inspect vehicles with the traffic police and are working with the MTC to increase the number of vehicle inspection centers to have one in every district.

Traffic Police

The Traffic Police is a Government Department within the Mozambique Republic Police, which is under the Ministry of Interior. The core mandate of the Traffic Police is to enforce speed limits, check motor vehicles' certificate of fitness, vehicle worthiness, enforce driving guidelines, to impose fines on motor vehicle drivers violating the traffic laws, and recording statistics on occurrence of road accidents in the country.

Ministry of Health

The Ministry of Health (MoH) is responsible for promoting health and well-being of the Mozambicans, with special attention to the vulnerable groups through innovative interventions and provision of good quality and sustainable health care. It also works with the Traffic Police to attend to victims of road accidents and transport them to the nearest hospital or health center for emergency treatment.

The Proponent will interact with other various institutions during the implementation of all phases of the proposed CRRN Project, as shown in the table below.

Table 9-1: Roles and responsibilities of stakeholders involved in ESMF implementation.

Stage in Subproject cycle	Responsible Entity	Roles and Responsibilities
Subproject Identification	RF/ANE, IP DINAB/DPTA/SPA World Bank	Conduct subproject World Bank screening. Overall coordination implementation of the project (ESMF, SEP, LMP, SMP, ESCP). Decisions on the project category and legal instruments (ESIA/ESMP, RAP, etc.). Review and confirm subproject eligibility and category
Subproject Preparation (Feasibility Study and Design)	ANE, IP/ Contractor and a contracted consultant ANE, IP/ Supervision Consultant (Engineer) RF/ ANE, IP/ Project Affected Persons, District / Municipal Administration, and local structures and leaders	Prepare safeguards instruments (ESIA/ESMP, Resettlement plans). Review the safeguards instruments. Participation in the: <ul style="list-style-type: none"> • Census and inventory of assets. • Public consultation. • Design and implementation of the Grievance Redress Mechanism.
Review and approval	RF/ANE, IP PIU, MTC PIU World Bank / Environmental Authority and District Government /SPA	Review and approval of safeguards instruments. Approval of RAP, ESIA/ESMP Issue environmental license

Stage in Subproject cycle	Responsible Entity	Roles and Responsibilities
<p>Project Implementation</p>	<p>PROSIR</p> <p>Procurement and E&S Specialists of ANE, IP PIU.</p> <p>Supervision Consultant (Engineer)</p> <p>National Agency for Environmental Quality Control (AQUA)</p> <p>RF/ANE and Provincial Delegation (in liaison with MOPHRH, MTC; MoH, Traffic Police, INATRO, DINAB, ANAC, DINAT, DPTA, WB</p> <p>Service Providers</p>	<p>Responsible for implementing RAP</p> <p>Prepare Bidding documents and include integrate E&S clauses during preparation of bidding documents and select a Contractor.</p> <p>Preparation and implementation of the C-ESMP.</p> <p>Monitor and report on the implementation of safeguards instruments to RF/ANE, IP and Contractor.</p> <p>Monitor the implementation of safeguards instruments.</p> <p>Implement and manage a Grievance Redress Mechanism (GRM) to resolve community complaints, GBV/SEA/SH complaint system and assist the victims.</p> <p>Responsible for monitoring and auditing the implementation of ESMP/HSP measures.</p> <p>Monitor the implementation of the RAP and Grievance Redress Mechanism (GRM), GBV/SEA/SH and provide training and awareness</p>

Stage in Subproject cycle	Responsible Entity	Roles and Responsibilities
	DPTA/Resettlement Committee	<p>campaign to the PIU staff at all level, all people at the site (Contractor, supervising staff and representative of the PIU institutions).</p> <p>Observe and monitor the preparation and implementation of RAP process.</p>
Equipment acquisition and trainings	Procurement Specialist, RF/ANE, IP PIU E&S Specialists and MTC PIU	Provide technical guidance on equipment acquisition and coordinate trainings required to the Procurement Unit
Final oversight visit to assess subproject compliance to E&S requirements (C-ESMP)	<p>RF/ANE, IP PIU, MTC PIU, MOPHRH, INATRO, Traffic Police, Provincial Delegation, DINAB, ANAC, DINAT, DPTA, WB project mission</p> <p>RAP implementation DPTA (Resettlement committee) Contractor</p>	Evaluation of safeguards instruments prepared by the consultant.
Operation / maintenance	<p>MOPHRH, RF/ANE, IP, DINAB, and Contractor(s)</p> <p>Traffic Police, INATRO</p>	<p>Project operation, maintenance, implementation of environmental and road safety measures (e.g. C-ESMP measures, road markings and inserting appropriate road signs).</p> <p>Monitoring traffic flow</p>

10 TRAINING AND CAPACITY BUILDING

10.1 Introduction

To successfully implement the recommendations in this ESMF, it is important to ensure that key stakeholders who have a role in implementing the ESMF understand its implementation requirements and a framework in place to guide their operations and involvement in the CRRN project.

During consultations with the Key stakeholders, gaps emerged showing a lack of adequate knowledge of WB Environmental Social Framework, implementation requirements of the ESMF, monitoring procedures as well as screening and scoping procedures and impact identification. Training/capacity building is paramount during project implementation.

10.2 Capacity Development and Training

The collaborating institutions under the project will include, RF/ANE, IP and MTC the main implementing agencies for the CRRN Project and will be working in close cooperation with several key implementing partners, including the Ministry of Public Works, Housing and Water Resources (MPWHWR), Ministry of Health, Traffic Police and any other Project Beneficiaries. Other institutions that will be directly involved in the implementation of CRRN Project may include Ministry of Land and Environment (MTA), Provincial Directorates of Land and Environment (DPTA), Environmental National Directorate (DINAB) and National Administration of Conservation Areas (ANAC) among others. Each of these categories will require responsive capacity enhancement in environmental and social management based largely on their levels of involvement in CRRN project activities. In addition, CRRN project may request national and international university departments to provide support in capacity building or providing mentoring.

Despite there being staff to handle environmental and social safeguards at ANE, IP, those at Government Agencies and most provincial and district governments, there is need to augment that potential through tailor-made trainings and provision of equipment-based support in-terms of operational equipment and transport, where possible. Training will in the first instance (during Project Launch Workshop) be provided by World Bank, MTA, INATRO, Ministry of Labor and Social Development to the CRRN project with regard to ESMF and ESMS processes, requirements, and approvals, including preparation of site-specific E&S instruments and their implementation.

Furthermore, ANE, IP, the provincial and Districts Authorities will undertake sensitization and awareness raising among key stakeholders and communities along the roads subprojects and sensitize them on the project objectives and its implementation modalities. Special emphasis will be put on the relevance and significance of environmental, social health and safety issues all through the sub project cycle so that they are familiar enough with these issues and can make informed and specific decisions and request for technical support whenever need arises. The ANE, IP Environmental and Social Specialists will work through the Provincial and District Authorities to organize practical trainings to build the knowledge and awareness of potential Project stakeholders, on environmental and social issues related to the proposed project activities. Training will also seek to build the skills of local people to participate actively in identifying appropriate mitigation measures to avoid or reduce potential negative impacts of project activities and address complaints which may arise during project implementation.

The following officers and/ or institutions, among others, shall be targeted to participate in the training workshops:

- ANE, IP: Environment and Social Safeguards Specialists, Project Coordinator, Procurement Specialist, FM/Monitoring and Evaluation Specialist, E&S focal persons at Provincial and District levels.
- Participating Government Agencies.
- Supervision Consultants and other Service Provides.
- Contractors and their individual staff.
- Operations and Maintenance Teams (before handover of each subproject after completion).
- Communities benefiting and affected by the Project.

Subsequent E&S trainings will target the following, on a quarterly basis (among others):

- E&S focal persons at Project Implementing Agencies.
- Supervision Consultant/s: Resident Engineer, E&S Specialists, Clerk of Works.
- Contractors: Contract Manager, E&S Officer.
- Operations and Maintenance Teams (before handover of each subproject after completion).

Other stakeholders to participate in E&S trainings shall be identified during the implementation phase based on the prevailing circumstances and needs at each given time. The follow-on training shall be developed by the E&S Specialists at the ANE, IP in consultation with the Bank and customized as applicable.

10.3 E&S Capacity Development and Training Areas and Schedule

The following are indicative capacity enhancement and training areas, which shall be reviewed and customized to each participating Client and training workshop:

- a. Introduction to the project, description of each project Component and Implementation requirements and coordination/ management arrangements.
- b. Understanding Mozambique's Environmental and Social Management Process, requirements of each, including their integration with WB-ESF.
- c. Introduction of ESF Instruments prepared for the Project and their implementation requirements (ESCP, ESMF, LMP, SRMP, SEP, GBV/SEA/SH-Action Plan, ESIAs/ESMPs, RAPs, etc.).
- d. Management and reporting on environmental and social aspects in projects.
- e. Specific aspects of environmental and social assessment and monitoring of the ESIAs, ESMP and ESMF
- f. Emergency preparedness and response procedures, WB Vs GoM Categorization and Reporting of incidents/ accidents, reporting of incidents and accidents, undertaking of Root Cause Analysis (RCA), preparation of Safeguards Corrective Action Plan (SCAP), maintaining incidents log.
- g. Traffic Management and general Health and Safety Management.
- h. Community Health and Safety.
- i. Stakeholder mapping and engagement.
- j. Contractor management on environment and social risks.
- k. HIV/AIDS, GBV/SEA, and gender mainstreaming in projects and reporting on such themes.

- l. Management of involuntary processes in projects.
- m. Employment and labor engagement processes, labour issues and workers' code of conduct.
- n. GRM issues in the projects, maintenance of Grievance Register/ Log, and their resolution mechanisms.
- o. Waste Management and Disposal of hazardous materials.
- p. Implementation of road works through protected areas, such as forests. And
- q. Implementation of ESMPs.
- r. Climate change risk assessment, Occupational Health and safety issues, Road safety assessment and audit, Environmental Management, air and noise monitoring, using kobo collect in undertaking various E&S studies.

Training Schedule

Project Launch: E&S Training shall commence during project launch, targeting PIU staff and participating Government Institutions/ Agencies, either having specific project Components to lead in implementation or having a Statutory mandate to undertake.

Immediately after Project Launch, Grievance Redress Committees (GRCs) shall be constituted along sub-projects that are ready to commence implementation. The GRCs shall be trained in their roles, and documentation of grievances.

Quarterly and Refresher E&S Trainings:

Community Trainings: Community sensitization shall be undertaken on a rolling and continuous basis, including use of community meetings at inhabited areas, marketplaces, churches, and schools. In addition, the project will undertake to air notices on local Radios about project implementation activities.

Daily Toolbox Meetings: These shall be undertaken targeting workers on a daily basis as part of the project contract by the Contractor.

E&S Training Resources:

The E&S Trainers shall be drawn from World Bank E&S Specialists to train the PIU, Implementing Agencies, and Statutory Agencies.

ANE, MTA, INATRO and Traffic Police shall undertake training of the Provincial and District Agencies and Communities.

A lumpsum budget of USD 160,000 is proposed to support the E&S training activities and included in the overall ESMF implementation budget.

11.1 Introduction

The RF/ANE, IP, Project beneficiaries will put in place adequate institutional arrangements, systems and resources to ensure effective monitoring of the ESMF and the relevant plans associated with implementation of CRRN Project.

The goals of monitoring will be:

- To measure the success rate of implementation of CRRN project activities;
- Determine the effectiveness of the mitigation measures to the negative impacts;
- Determine further interventions (such as mitigation) required to enhance implementation of the project; and
- Complying with the World Bank ESSs, World Bank Group EHS Guidelines and the national environmental and social requirement.

The goal of monitoring activities is to ensure that component activities comply with the plans and procedures laid out in the ESMF. Monitoring responsibilities and inspection activities will be carried out by RF/ANE, IP, Provincial and District Authorities who will administer the overall project-related environmental and social monitoring and implementation as laid out in this ESMF through their Environmental and Social specialists.

11.2 ESMF Implementation Monitoring and Reporting

The overall project M&E, will be led by the RF/ANE, IP on behalf of Ministry of Public Works, Housing and Water Resources (MPWHWR) in collaboration with all participating agencies, applying a Results Framework which includes baseline measurements and annual targets to monitor results and progress.

WB expects its clients to implement the environmental and social measures set out in the various plans (ESCP, ESMF, LMP, SRMP, SEP, GBV/SEA/SH-Action Plan, ESIA/ESMPs, RAPs, etc.), which are referred to in the financing agreements, in compliance with the required deadlines. Implementation of the ESMF includes monitoring, reporting and evaluation. According to the ESCP, the project will support the operational expenditures related to the management, monitoring, and evaluation, in compliance with the Environmental Laws and all safeguard measures provided in the ESCP and specified by WB from time to time in relation to social and environmental aspects of the Project.

The compliance with implementation of ESMF requirements and guidance will be monitored. The RF/ANE, IP will establish a monitoring system involving coordination between their staff and respective provincial and district authorities, as well as respective statutory Agencies to ensure effective preparation and implementation of the subprojects instruments in line with the frameworks prepared (ESCP, ESMF, LMP, SRMP, SEP, GBV/SEA/SH-Action Plan, ESIA/ESMPs, RAPs, etc.), in order to address all activities that have potentially significant impacts on the environment, occupational health and safety, and social during implementation. In addition, environmental and social monitoring shall address all possible effects that the specific subprojects may have on the environment. The monitoring, therefore, shall encompass vegetation loss, effects on natural terrestrial and aquatic

habitats, erosion, air and water quality, as well as social surveys, impacts on vulnerable groups, traffic safety and health, community health and safety aspects, and other occupational health and safety issues. A set of monitoring indicators will be determined during ESMP implementation and will be guided by the indicators contained in the ESMF. Appropriate monitoring formats will be prepared for monitoring and reporting requirements.

Good monitoring and supervision practice should focus on ensuring that in selected sub-projects:

- i). there is timely and efficient implementation of agreed ESSs measures;
- ii). staff at the subproject level have received adequate and appropriate training and technical support;
- iii). the subprojects' ESMPs are implemented in conformity of the ESSs and loan agreement (and the Environmental and Social Commitment Plan, ESCP);
- iv). sub-project staff and the communities "own" the subprojects and are actively participating in or monitoring subproject implementation;
- v). channels for complaints and seeking redress are well- understood and are dealt with promptly and fairly in order.

11.3 ESMF Implementation Monitoring Indicators

The ESMF M&E outcome indicators should contribute to ensuring that:

- E&S screening of all subprojects is being undertaken and issues identified in the screening are being addressed. If not, the RF/ANE, IP, Implementing Agencies, contractor/ service providers (Consultants) must develop and present for approval a plan to regain and/or maintain future compliance.
- E&S instruments specific to subproject level are being prepared in line with guidance provided in the respective frameworks. Where an ESIA and or an ESMP is developed, that all the commitments with regard to E&S impact mitigation, monitoring, training of workers, etc. have been implemented. If not, the RF/ANE, IP shall develop and agree to a plan to regain and maintain future compliance.
- New environmental or social concerns that may have arisen because of the project implementation and operations are addressed and documented.
- If the environmental and social concerns identified are deemed significant the RF/ANE, IP may need to modify the applicable instruments (e.g. ESMPs) to reflect a need for ongoing work to address the new impacts. Information on this new plan will be provided in the annual report and or be required shortly thereafter.
- Implementation of all the requirements specified in the ESCP, following the 10 ESSs.

11.4 Regular Reporting to the World Bank

Being the main implementing and coordinating Government Agency, ANE, IP will on a quarterly and Annual basis prepare and submit to WB monitoring progress reports on the environmental, social, health and safety (ESHS) performance of the Project, including but not limited to, the implementation of the ESCP, status of preparation and implementation of E&S documents required under the ESCP, stakeholder engagement activities, serious/severe incidents/ accidents, and the functioning of the grievance mechanism. Besides the quarterly, implementation support mission, and annual reports, the reporting period may vary from time to time, depending on nature of ongoing activities, and this may range from monthly or activity-based reports. Depending on the nature of the intervention and

availability and or need for close follow up, more frequent monitoring visits can be made to projects that show any signs of risks or impacts.

The annual environmental, social, health and safety reports should also be submitted to the National Environmental Authorities, the MTA/AQUA/SPA.

The findings from the regular monitoring and inspection for compliance on Environmental and Social risk management (monitoring reports) will be compiled by the individual Contractors, Supervision Consultants, Service Providers and sent to the ANE, IP for review, validation and compilation. These quarterly monitoring reports, along with a quarterly summary of the ESMF implementation prepared by the ANE, IP, will be consolidated by the Environmental and Social specialists assigned to directly support the CRRN project and the TTL will share the reports with the World Bank for review, after which the reports may be shared with other interested stakeholders by ANE, IP.

The Environmental and Social Progress Reports should provide implementation progress as per contractual obligations that should be developed by Contractors during works execution (monthly and quarterly progress reports) for the whole project periods. The Progress Report contains basic information about project information, project implementation stage, monitored parameters, the Contractors' staffing, construction materials, waste management, OHS issues, GRM issues, mitigation measures undertaken, the E&S challenges as well as recommendations. The report can be shared with the WB and other stakeholders for review.

11.5 Project Closure Environmental and OSH Audit

Before closure of project implementation (six months to closure), ANE, IP shall commission an independent Environmental and Social Audit with a view of identifying any residual issues which will require to be addressed and/or followed up before and after project implementation. Individual sub-projects E&S Audits shall be undertaken before completion and/or handover of the individual sites to MTC for operations phase, with a view of identifying any E&S issues which may require correction as the subproject moves into operation phase.

In addition, Annual Environmental and Social Audits shall be undertaken in accordance with the Decree No 25/ 2011 which approves regulations on the Environmental audit process.

12 ESMF IMPLEMENTATION BUDGET COMPONENTS AND SCHEDULE

Financial resources are required to support implementation of the ESMF and general environmental and social management activities. Below are budget estimates to support basic environmental and social project management activities. The project is urged to prioritize and financially fund the listed activities in order to mitigate the likely environmental and social risks and impacts of the project activities.

Under Project Component 3 Institutional Strengthening and Project Management, the project shall allocate an adequate budget to undertake implementation of the environmental and social mitigation measures and conduct effective and meaningful stakeholder engagement with all of the project affected groups throughout the life cycle of the project. The budget shall be adjusted and adapted as and when necessary to ensure effective and efficient implementation of environmental and social risk management measures. Government of Mozambique (GoM) through the RF/ANE, IP, under the Ministry of Public Works, Housing and Water Resources (MPWHWR) shall commit to implement the project in compliance with World Bank's ESF requirements as documented in the Environmental and Social Commitment Plan which forms part of the Financing Agreement.

Table 12-1: ESMF Implementation Budget

Item	Annual Budget estimates (USD, 000)					
	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028	TOTAL
E&S Screening, Scoping, and Development of TORs for ESIA's for (phase I) for upgrade and Rehabilitation of 3 roads C.Delgado = 3 roads subprojects. By ANE, IP/DPTA	30					30
E&S Screening, Scoping, and Development of TORs for ESIA's for upgrade and rehabilitation of 7 roads in C.Delgado, Nampula & Niassa. = 7 sub-projects. By ANE, IP/DPTA	70					70
Development of ESIA's for for upgrade and Rehabilitation of 3 roads C.Delgado = 3 roads subprojects. By hired Consultants	400					400
Development of ESIA's for upgrade and rehabilitation of 7 roads in C.Delgado, Nampula & Niassa. = 7 sub-projects. By hired Consultants		500				500

Item	Annual Budget estimates (USD, 000)					
	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028	TOTAL
E&S Screening, Scoping, and Development of TORs for ESIA for construction and rehabilitation of 5 Bridges and drainage structures under component 1.b in C.Delgado = 5 subprojects. By ANE, IP/DPTA	25					25
E&S Screening, Scoping, and Development of TORs for ESIA/ESMPs for installation of 5 metallic bridges (1500 m) in C.Delgado, Niassa, and Nampula = 5 subprojects. By ANE, IP/DPTA	25					25
Development of ESIA for construction and rehabilitation of 5 Bridges and drainage structures under component 1.b in C.Delgado = 5 subprojects By hired Consultants		250				250
Development of ESIA/ESMPs for installation of 5 metallic bridges (1500 m) in C.Delgado, Niassa, and Nampula = 5 subprojects By hired Consultants		250				250
Subprojects supervision by project Environmental and Social Specialists at ANE, IP – Monthly and Quarterly site visits and Compliance Inspections.	20	50	50	50	20	190
Implementation of General Capacity Development Plan for Management of Environmental and Social Risks and Impacts in the project (Chapter 10).	30	50	50	20	10	160
Strengthening Grievance Redress Mechanism structures and facilitating general Stakeholder Engagement as spelt out in the SEP.	30	40	50	20	10	150
Service provider for GBV/SEA/SH mitigation		200				

Item	Annual Budget estimates (USD, 000)					
	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028	TOTAL
measures Implementation						200
HIV/AIDS Service Provider		100				100
Annual and Project Closure E&S Audits and			200	300	250	750
Operational, Salaries, monitoring equipment and tools <i>(budget to be drawn from the Component 3 line – item of Institutional capacity development)</i>	-	-	-	-	-	-
Total Annual Budget/ GRAND TOTAL	630	1,440	350	390	290	3,100

Note: The figures provided are lump-sum budget estimates

Concept Environmental and Social Review Summary for Climate Resilient Roads for the North of Mozambique (CRRN), P500488, World Bank, Nov. 2023.

Draft Concept Note for Climate Resilient Roads for the North of Mozambique (CRRN), P500488, World Bank, Nov. 2023.

Environmental and Social Management Framework , World Bank, 2018.

Environmental and Social Management Framework for Integrated Feeder Road Development Project, ANE, January 2018.

International Organization for Standardization. (2018). ISO 31000:2018 Risk management — Guidelines. Geneva, Switzerland: ISO.

International Organization for Standardization. (2019). ISO 31010:2019 Risk management — Risk assessment techniques. Geneva, Switzerland: ISO.

Terms of Reference for Preparation of Environmental and Social Instruments for Climate Resilient Roads for the North of Mozambique (CRRN), P500488, ANE, Nov. 2023.

ANNEX 1. ENVIRONMENTAL AND SOCIAL SCREENING FORM

The objective of the screening form is to guide ANE, IP in 1) assessing the various environmental and social risks and impacts that different sub-project activities will pose, and 2) selecting the right environmental and social management instruments/ plans that will be applicable to those sub-project activities.

The screening form below goes through each ESS and asks ANE, IP/ the Borrower whether sub-project activities will result in certain key environmental and social impacts. Based on these, it instructs ANE, IP which management plans to prepare and/or use. **You may find that for each specific subproject, there are additional risks that may need to be considered under different ESSs.**

The Screening Form is meant to exclude certain activities as well, for example, any activity that may pose high risk, degrade critical habitats or involve mass physical displacement.

The E&S Screening procedure comprises of two stages-process: (1) Initial screening by using the **Exclusion List** in Table 7-4 of the ESMF; and (2) Screening the proposed activities to identify the approach for E&S risk management. This Screening Form is the second stage of screening process and is to be used for all subproject activities. The completed forms will be signed and kept in the Project ESF file. The World Bank may review a sample of the forms during implementation support visits.

This form is to be used by the executing agency ANE, IP and/or the Project Implementation Unit (PIU) and relevant local institutions to screen potential environmental and social risk levels of a proposed subproject under the Project. The screening will determine the relevance of Bank environmental and social standards (ESS), propose its environmental and social risk levels, and the instrument to be prepared for the sub project.

Subproject Name	
Subproject Location	
Subproject Proponent	
Estimated Investment	
Start/Completion Date	

Questions	Answer			ESS relevance	Due diligence / Actions if “yes”
	Not Applicable	Yes	No		
1. Is the subproject likely to have significant adverse environmental impacts that are sensitive and unprecedented that trigger the ‘Ineligible Activities’ or other exclusion criteria?				ALL	If “Yes”: Exclude from project.
2. Does the subproject involve civil works that include new/upgrading or rehabilitation of infrastructure				ESS 1	Site Specific ESIA and ESMP. Include E&S risk management measures in bidding documents
3. Will construction or renovation works require new borrow pits or quarries to be opened?				ESS1	Site-specific and/ ESIA ESMP Include E&S risk management measures in bidding documents.

Questions	Answer			ESS relevance	Due diligence / Actions if “yes”
	Not Applicable	Yes	No		
4. Is there sound regulatory framework, institutional capacity in place the sub-project?				ESS 1	ESMP, SEP ¹
5. Does the project site and facilities have any existing environmental liabilities (non-compliances, site contamination, etc.)?				ESS 1	ESMP
6. Does the project lead to any risks and impacts on, individuals or groups who, because of their particular circumstances, may be disadvantaged or vulnerable. ²				ESS1	If “Yes”: Apply relevant measures described in the ESMF and SEP.
7. Does the subproject area present considerable Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH) risks?				ESS2, ESS4, ESS10	Assessment of risks and GBV/SEA action plan, SEP, ESMP
8. Does the subproject involve recruitment of workforce including direct, contracted, primary supply, and/or community workers?				ESS 2	Labor management Procedures (LMP), ESMP and, SEP

¹ SEP: Stakeholder Engagement Plan

² “Disadvantaged or vulnerable” refers to those individuals or groups who, by virtue of, for example, their age, gender, ethnicity, religion, physical, mental or other disability, social, civic or health status, sexual orientation, gender identity, economic disadvantages or ethnic peoples status, and/or dependence on unique natural resources, may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project’s benefits.

Questions	Answer			ESS relevance	Due diligence / Actions if “yes”
	Not Applicable	Yes	No		
9. Does the subproject involve uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor?				ESS2	If “Yes”: Exclude from project.
10. Does the subproject include an independent unit/or group for accountability and grievance and conflict resolution?				ESS 2	ESMP, SEP, GRM ³
11. Will the workers be exposed to workplace hazards that needs to be managed in accordance with local regulations and EHSGs? Do workers need PPE relative to the potential risks and hazards associated with their work?				ESS2	If “Yes”: Apply measures in the project LMP.
12. Is there a risk that women may be underpaid when compared to men when working on the project construction?				ESS2	If “Yes”: Apply measures in the project LMP.
13. Is the subproject associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant and/ or significant generation of non-hazardous waste or hazardous waste?				ESS3, ESS4	If “Yes”: Prepare a site-specific ESMP for the proposed subproject. Include E&S risk management measures in bidding documents. ESMP, WMP ⁴ , SEP.

³ GRM: Grievance and redress Mechanism

⁴ WMP: Waste management Plan

Questions	Answer			ESS relevance	Due diligence / Actions if “yes”
	Not Applicable	Yes	No		
14. Does the subproject release airborne and/or water borne pollutants with concentration above the WHO / World Bank guidelines or National Guidelines?				ESS 3	ESMP, SEP
15. Does the subproject result in GHG emissions or black carbons?				ESS 3	ESMP, SEP
16. Does the subproject involve transboundary transportation of specimen, samples, infectious and hazardous materials?				ESS 3	WMP, SEP
17. Does the subproject use pesticides, and herbicides ?				ESS 3	IPPMP ⁵ , ESMP
18. Is there a risk of increased community exposure to communicable disease (such as COVID-19, HIV/AIDS, Malaria), or increase in the risk of traffic related accidents?				ESS4	If “Yes”: Apply measures in the project LMP and relevant measures in SEP.
19. Is an influx of workers, from outside the community, expected? Would workers be expected to use health services of the community? Would they create pressures on existing community services (water, electricity, health, recreation, others?)				ESS2, ESS4	If “Yes”: Apply measures in the project LMP.

Questions	Answer			ESS relevance	Due diligence / Actions if “yes”
	Not Applicable	Yes	No		
20. Is there a risk that SEA/SH may increase as a result of project works?				ESS4, ESS10	If “Yes”: Apply measures in the project LMP & GBV/SEA/SH Action Plan
21. Would any public facilities, such as schools, health clinic, church be negatively affected by construction?				ESS4	If “Yes”: Apply relevant measures based on the Conditions of Contract provided in the ESMF (unless one of the other questions in the screening form raises specific environmental and social risks and requires a site-specific ESMP).
22. Will the subproject require the government to retain workers to provide security to safeguard the subproject?				ESS4	If “Yes”: Prepare a site-specific ESMP for the proposed subproject, including an assessment of potential risks and mitigation measures of using security personnel.

Questions	Answer			ESS relevance	Due diligence / Actions if “yes”
	Not Applicable	Yes	No		
<p>23. 20. Will the subproject require the involuntary acquisition of new land (will the government use eminent domain powers to acquire the land)?⁶</p> <p>24. Will the subproject lead to temporary or permanent physical displacement (including people without legal claims to land)?</p> <p>25. Will the subproject lead to economic displacement (such as loss of assets or livelihoods, or access to resources due to land acquisition or access restrictions)?</p> <p>26. Are there any associated facilities needed for the subproject (such as access roads or electricity transmission lines) that will require the involuntary acquisition of new land?</p>				ESS 5	If yes, prepare RAP (if more than 200 PAPs) or Livelihoods Restoration Plan (if less than 200 PAPs).

⁶ Environmental and Social Standard 5, Footnote 10: “In some circumstances, it may be proposed that part or all of the land to be used by the project is donated on a voluntary basis without payment of full compensation. Subject to prior Bank approval, this may be acceptable providing the Borrower demonstrates that: (a) the potential donor or donors have been appropriately informed and consulted about the project and the choices available to them; (b) potential donors are aware that refusal is an option, and have confirmed in writing their willingness to proceed with the donation; (c) the amount of land being donated is minor and will not reduce the donor’s remaining land area below that required to maintain the donor’s livelihood at current levels; (d) no household relocation is involved; (e) the donor is expected to benefit directly from the project; and (f) for community or collective land, donation can only occur with the consent of individuals using or occupying the land. The Borrower will maintain a transparent record of all consultations and agreements reached.”

Questions	Answer			ESS relevance	Due diligence / Actions if "yes"
	Not Applicable	Yes	No		
27. Will the project involve the conversion or degradation of non-critical natural habitats?				ESS6	If "Yes": 1. Prepare a site-specific ESMP for the proposed subproject. 2. Include E&S risk management measures in bidding documents.
28. Will this activity require clearance of mangroves?				ESS6	If "Yes": Exclude from project.
29. Will this activity require clearance of trees, including inland natural vegetation?				ESS6	If "Yes": 1. Prepare a site-specific ESMP for the proposed subproject. 2. Exclude from project if more than x hectares of tree and vegetation cutting is expected. 2. Include E&S risk management measures in bidding documents.
30. Will there be any significant impact on any ecosystems of importance (especially those supporting rare, threatened or endangered species of flora and fauna)?				ESS6	If "Yes": Exclude from project.

Questions	Answer			ESS relevance	Due diligence / Actions if “yes”
	Not Applicable	Yes	No		
31. - Will the project affect flora of fauna? 32. Does the subproject have a mitigation hierarchy for minimizing, mitigating and managing the adverse impacts and risks related to the potential threats to biodiversity?				ESS 6	Ecosystem/ Biodiversity Management Plan
33. .Will a river or stream ecology be adversely affected due to the installation of structures such as bridges, fixed barriers, and by-passes. Attention should be paid to water quality and quantity; the nature, productivity and use of aquatic habitats, and variations of these over time?				ESS 6	Ecosystem/ Biodiversity management Plan, ESMP.
34. Are there any indigenous people “Sub-Saharan African Historically Underserved Traditional Local Communities” and vulnerable groups present in the subproject area and are likely to be affected by the proposed subproject negatively or positively?				ESS 7	Prepare Vulnerable Groups Planning Framework (VGPF) to inform sub-project Vulnerable Groups Plan (VGP), OR include the requirements of an Indigenous Peoples Plan in the SEP.
35. Does (or will) the subproject undertake free, prior, and informed consultations with affected Indigenous Peoples/and Sub Saharan African historically underserved communities				ESS 7	VGPF and VGP, SEP and GRM OR include the requirements of an Indigenous Peoples Plan in the SEP.

Questions	Answer			ESS relevance	Due diligence / Actions if “yes”
	Not Applicable	Yes	No		
36. Is the subproject to be located adjacent to a sensitive site (historical or archaeological or culturally significant site) or facility?				ESS8	Undertake PCRs Inventory and include in ESIA/ESMP, SEP and GRM.
37. Locate near buildings, sacred trees or objects having spiritual values to local communities (e.g. memorials, graves or stones) or require excavation near there?				ESS8	Apply chance find procedures for construction activities
38. Did the proponent of the subproject carry out regular consultations with a wide range of project stakeholders				ESS10	ESMP, SEP and GRM
39. Can the stakeholders play a significant role in shaping or affecting the subproject, either positively or negatively				ESS 10	SEP and GRM

RECOMMENDATIONS AND CERTIFICATION

Environmental category: (tick where applicable)

Category (In line with ESF & Ug-NEA) - Plz refer to Section 7.2.2 for details	Justification
<p>Exempt: Does not require further environmental or social assessment (<i>Sections 113 (3) & 182 (2) & Schedule 11 of NEA</i>) – Projects exempted from ESAs studies</p>	
<p>Low/ Moderate Risk: Requires submission of only a Project Brief or ESMP (<i>Section 112 & Schedule 4 of NEA</i>)</p>	
<p>Substantial/ High Risk: Requires a full/Mandatory ESIA to be submitted on date (<i>Sections 49 (1&2), 113, 126(2), 176(1), 177(1) & 181(2) & Schedules 5, 6, 10 of NEA</i>)</p>	
<p>Requires a RAP to be submitted on date</p>	
<p>Requires an Indigenous Peoples Plan (IPP)</p>	
<p>Requires a Physical Cultural Resources Plan</p>	
<p>Requires a Pest Management Plan</p>	
<p>Requires a Security Management Plan</p>	

CERTIFICATION BY THE DISTRICT/ MUNICIPALITY E&S STAFF

(Environmental & Social Focal Officer)

We certify that we have thoroughly examined all the potential adverse effects of this subproject and recommended appropriate Risk Categorization and E&S Instrument/s to be prepared/used.

Reviewer/s Title:

.....

Name/s and Contact/s (EM + TEL):

.....

.....

Signature/s:
.....

Date:
.....

CERTIFICATION BY THE PROVINCIAL AUTHORITIES

(Provincial Environment & Social Focal Person/s)

We certify that we have thoroughly examined all the potential adverse effects of this subproject and recommended appropriate Risk Categorization and E&S Instrument/s to be prepared/used.

Reviewer/s Title:

.....

Name/s and Contact/s (EM + TEL):
.....

.....

Signature/s:
.....

Date:
.....

CERTIFICATION BY THE ANE, IP/ CRRN Project PIU

(Project Environmental, Health and Safety Specialist & Project Social Development Specialist)

We certify that we have thoroughly examined all the potential adverse effects of this subproject and recommended appropriate Risk Categorization and E&S Instrument/s to be prepared/used.

Reviewer/s _____ Title:

Name/s _____ and _____ Contact _____ (EM _____ +
TEL):.....
.....

Signature/s: _____

Date: _____

ANE, IP PROJECT COORDINATOR'S APPROVAL

Screening Results were reviewed and approved by: (Project Manager)

Name _____

Position _____

Signature _____

Date _____

ANNEX 2. SAMPLE GENERAL TORS FOR PREPARATION OF SITE-SPECIFIC SUBPROJECTS ESIAS AND ESMP TEMPLATE

A. Sample Terms of Reference for preparation of Environmental and Social Impact Assessment

These TORs are provided in case there is need to undertake site-specific ESIA identified during E&S screening, and shall be customized as appropriate.

I. Introduction and context

This section will be completed at the appropriate time and will provide the necessary information with respect to the context and methodological approaches to be undertaken.

II. Objectives of the study

This section will (i) outline the objectives and particular activities of the planned activity; and (ii) indicate which activities are likely to have environmental and social impacts that will require appropriate mitigation. (Adapted to specific activities)

or

III. Terms of Reference

The consultant will perform the following tasks:

- a) Carry out a description of the biophysical characteristics of the environment in which the planned activity will take place, and highlight the major constraints that need to be taken into account during construction as well as during operation of the facility;
- b) Describe the proposed location and physical boundaries, including maps and coordinates, and site layout plans, of the project clearly showing the projected area of land or air that may be affected by the project activities, or, if it is a linear activity, a description of the route of the activity and analysis of site selection procedure and alternative routes;
- c) A description of the manner in which the proposed project and its location conform to existing laws and standards governing such projects, including a reference to relevant plans required under the various National laws;
- d) Assess the design of the project and any other project related components, including the activities that shall be undertaken and a description of the major material inputs to be used during construction or development and operation of the project;
- e) Describe baseline conditions of the physical, biological and socioeconomic environment of the project area, including results of relevant studies and other geophysical and geotechnical studies. Carry out a description of the socio-economic environment of the planned investment, and highlight the major constraints that need to be taken into account during construction as well as during operation of the facility;
- f) Assess the potential environmental, health, safety and social impacts due to construction or rehabilitation activities, and recommend mitigation measures to be taken as appropriate during the

preconstruction, construction, operational and decommissioning phases of the project, including cost estimates;

- g) Assess the potential environmental and social impacts due to the proposed subprojects that might be needed for the planned facility and make appropriate recommendations;
- h) An assessment of climate- related impacts associated with the project, including potential climate benefits and carbon footprints of the proposed project, as well as the potential vulnerability of the proposed project or activity to climate change, and the proposed adaptation and mitigation measures;
- i) Assess the need for liquid and solid waste collection, disposal and management in the facility, and make recommendations accordingly;
- j) Discuss alternative project designs and make recommendations; including a zero or no project alternative in terms of project location, project design or technologies to be used, and a justification for selecting the chosen option;
- k) Assess alternative project designs and make recommendations;
- l) An assessment of alternative resettlement areas for project affected persons, if any or any plans of compensation;
- m) An assessment of the secondary or cumulative impact of the project and associated activities;
- n) Carry out a review of the respective national environmental policies, legislation, regulatory and administrative/ institutional frameworks in conjunction with the donors' safeguard policies, indicate which of these policies is relevant to/ triggered by the planned activity, identify any gaps that might exist, and make recommendations as to how potential gaps should be bridged in the context of the planned activity;
- o) Review the Conventions and Protocols to which the country is a signatory;
- p) Provide an indication of permits, licenses or other approvals that may be required for the project;
- q) Assess the country's environmental assessment and management capacity, as well as the capacity to implement the proposed mitigation measures, and make appropriate recommendations, including potential capacity building and training needs, and their costs;
- r) Prepare an Environmental and Social Management Plan (ESMP) for the planned activity. The ESMP should outline (a) potential environmental and social impacts resulting from the activity; (b) proposed mitigation measures; (c) institutional responsibilities for implementation of the mitigation measures; (d) monitoring indicators; (e) institutional responsibilities for monitoring the implementation of the mitigation measures; (f) cost estimates for these activities; and (g) time horizons for implementing the ESMP.
- s) Public consultations: ESIA results and proposed mitigating measures will then be shared with the potentially affected population, NGOs, local authorities and the private sector working in the area where the activity will take place. Minutes of this consultation will form an integral part of the report.

- t) *Task 10: Cumulative Impact Assessment:* As part of the overall Environmental and Social Impact Assessment, develop a Cumulative Impact Assessment (CIA) to further assess the potential impacts and risks of the whole SRSEI project in its all phases, in the context of potential effects from other developments and natural environmental and social external drivers on a chosen Valued Environmental and Social Component (VECs) and determine if the project is incrementally responsible for adversely affecting an ecosystem component or specific characteristic beyond Environmental and Social Assessment for the CRRN project in Mozambique – an acceptable predetermined threshold (carrying capacity), at the scale and level of detail appropriate to the potential risks and impacts.

Specifically, the CIA should aim at achieving following objectives:

- i. Assess the potential impacts and risks of a proposed development over time, in the context of potential effects from other developments and natural environmental and social external drivers on a chosen VEC.
- ii. Verify that the proposed development's cumulative social and environmental impacts and risks will not exceed a threshold that could compromise the sustainability or viability of selected VECs.
- iii. Confirm that the proposed project's value and feasibility are not limited by cumulative social and environmental effects.
- iv. Support the development of governance structures for making decisions and managing cumulative impacts at the appropriate geographic scale (e.g., airshed, river catchment, town, regional landscape).
- v. Ensure that the concerns of affected communities about the cumulative impacts of the proposed project are identified, documented, and addressed.
- vi. Manage potential reputation risks related with the project.

IV. As appropriate, the combination or elements of the tools and methods to be employed for the ESIA study are:

- a) **Environmental and Social Impact Assessment (ESIA):** The Consultant will undertake an Environmental and Social Impact Assessment (ESIA) to assess and identify the potential environmental and social risks and impacts of the proposed project, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures.
- a) **Environmental and Social Management Plan (ESMP):** The Consultant will prepare an Environmental and Social Management Plan (ESMP) detailing the mitigation measures to eliminate or offset the identified adverse environmental and social risks and impacts or to reduce them to acceptable levels, and devise enhancement measures for the positive impacts to be implemented during the implementation of the project, and the specific actions to implement these measures.
- b) **Prepare the following ESIA annexes:**
 - i. Occupational Health and Safety (OHS) plan
 - ii. Community Health and Safety Plan, which will also include elements of LMP guided by the overall project LMP prepared during project preparation.

- iii. Biodiversity Management Plan (If the ESIA assessment establishes presence of natural and/or critical habitat). Otherwise, measures to protect vegetation/wildlife can be included in the ESMP.
- iv. Traffic Safety Management Plan
- v. Chance Find Procedures
- vi. Waste Management Plan
- vii. SEA/SH Action Plan

V. Key Expertise (to be customized as appropriate)

Required expert	Number	Education	Required experience
Environmentalist (Team Leader)	1	Master's degree in environmental management, environmental sciences or a related field.	Ten (10) years working experience with at least 7 years in conducting ESIA. S/he should have expertise and knowledge in the preparation of Environmental and Social Assessment and Environmental audit
OHS expert	1	Master's degree in occupational health and safety or a related field.	Minimum of 7 years post graduate experience on his/her profession, of which at least 4 years' experience working in area or similar nature of job. Experience for working as similar position at least in two similar assignments.
Social Experts.	1	Master's degree in Gender, Social Sciences, Demography or Development Studies or a related field.	Over 5 years of relevant experience in social impact assessment. Similar relevant work experience on at least three previous projects that used the participatory and community-based approach. A good understanding of the local context Zambia is mandatory.
GIS/RS Specialist	1	Bachelor's degree GIS, GIS and Remote sensing, Geomatics or a related field.	Minimum of 6 years of practical experience on his/her profession, of which at least 3 years' experience as working in area or similar nature of job. Experience for working as similar position at least in two similar assignments.

VI. Indicative Outline of the ESIA Report

Where an environmental and social impact assessment is prepared as part of the environmental and social assessment, it will include the following:

(a) Executive Summary

- Concisely discusses significant findings and recommended actions.

(b) Legal and Institutional Framework

- Analyzes the legal and institutional framework for the project, within which the environmental and social assessment is carried out, including the issues set out in ESS1, paragraph 26 of the ESF.
- Compares the Borrower's existing environmental and social framework and the ESSs and identifies the gaps between them.
- Identifies and assesses the environmental and social requirements of any co-financiers.

(c) Project Description

- Concisely describes the proposed project and its geographic, environmental, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power supply, water supply, housing, and raw material and product storage facilities), as well as the project's primary suppliers.
- Through consideration of the details of the project, indicates the need for any plan to meet the requirements of ESS1 through 10.
- Includes a map of sufficient detail, showing the project site and the area that may be affected by the project's direct, indirect, and cumulative impacts (including off-site facilities).

(d) Baseline Data

- Sets out in detail the baseline data that is relevant to decisions about project location, design, operation, or mitigation measures. This should include a discussion of the accuracy, reliability, and sources of the data as well as information about dates surrounding project identification, planning and implementation.
- Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions.
- Based on current information, assesses the scope of the area to be studied and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences.
- Takes into account current and proposed development activities within the project area but not directly connected to the project.

(e) Environmental and Social Risks and Impacts

- Takes into account all relevant environmental and social risks and impacts of the project. This will include the environmental and social risks and impacts specifically identified in ESS2–8,

and any other environmental and social risks and impacts arising as a consequence of the specific nature and context of the project, including the risks and impacts identified in ESS1, paragraph 28.

(f) Mitigation Measures

- Identifies mitigation measures and significant residual negative impacts that cannot be mitigated and, to the extent possible, assesses the acceptability of those residual negative impacts.
- Identifies differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable.
- Assesses the feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of proposed mitigation measures, and their suitability under local conditions; and the institutional, training, and monitoring requirements for the proposed mitigation measures.
- Specifies issues that do not require further attention, providing the basis for this determination.

(g) Analysis of Alternatives

- Systematically compares feasible alternatives to the proposed project site, technology, design, and operation—including the “without project” situation—in terms of their potential environmental and social impacts.
- Assesses the alternatives’ feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of alternative mitigation measures, and their suitability under local conditions; and the institutional, training, and monitoring requirements for the alternative mitigation measures.
- For each of the alternatives, quantifies the environmental and social impacts to the extent possible, and attaches economic values where feasible.

(h) Design Measures

- Sets out the basis for selecting the particular project design proposed and specifies the applicable ESHGs or if the ESHGs are determined to be inapplicable, justifies recommended emission levels and approaches to pollution prevention and abatement that are consistent with GIIP.

(i) Key Measures and Actions for the Environmental and Social Commitment Plan (ESCP)

- Summarizes key measures and actions and the timeframe required for the project to meet the requirements of the ESSs. This will be used in developing the Environmental and Social Commitment Plan (ESCP).

(j) Appendices

- List of the individuals or organizations that prepared or contributed to the environmental and social assessment.
- References—setting out the written materials both published and unpublished, that have been used.

- Record of meetings, consultations and surveys with stakeholders, including those with affected people and other interested parties. The record specifies the means of such stakeholder engagement that were used to obtain the views of affected people and other interested parties.
- Tables presenting the relevant data referred to or summarized in the main text.
- List of associated reports or plans.

B. Indicative Outline of Environmental and Social Management Plan (ESMP)

Environmental and social risks and impacts are strongly linked to subproject location and scope of activities. This ESMP should be customized for each specific subproject location and activities.

An ESMP consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. The ESMP also includes the measures and actions needed to implement these measures. The Borrower will

- (a) identify the set of responses to potentially adverse impacts;
- (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and
- (c) describe the means for meeting those requirements.

Depending on the project, an ESMP may be prepared as a stand-alone document or the content may be incorporated directly into the ESCP. The content of the ESMP will include the following:

(a) Mitigation

- The ESMP identifies measures and actions in accordance with the mitigation hierarchy that reduce potentially adverse environmental and social impacts to acceptable levels. The plan will include compensatory measures, if applicable. Specifically, the ESMP:
 - (a) identifies and summarizes all anticipated adverse environmental and social impacts (including those involving indigenous people or involuntary resettlement);
 - (b) describes—with technical details—each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;
 - (c) estimates any potential environmental and social impacts of these measures; and
 - (d) takes into account, and is consistent with, other mitigation plans required for the project (e.g., for involuntary resettlement, indigenous peoples, or cultural heritage).

(b) Monitoring

- The ESMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the environmental and social assessment and the mitigation measures described in the ESMP. Specifically, the monitoring section of the ESMP provides
 - (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds and performance indicators that will signal the need for corrective actions; and
 - (b) monitoring and reporting procedures to
 - i. ensure early detection of conditions that necessitate particular mitigation measures, and
 - ii. furnish information on the progress and results of mitigation.

(c) Capacity Development and Training

- To support timely and effective implementation of environmental and social Project components and mitigation measures, the ESMP draws on the environmental and social assessment of the existence, role, and capability of responsible parties on site or at the agency and ministry level.
- Specifically, the ESMP provides a specific description of institutional arrangements, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).
- To strengthen environmental and social management capability in the agencies responsible for implementation, the ESMP recommends the establishment or expansion of the parties responsible, the training of staff and any additional measures that may be necessary to support implementation of mitigation measures and any other recommendations of the environmental and social assessment.

(d) Implementation Schedule and Cost Estimates

- For all three aspects (mitigation, monitoring, and capacity development), the ESMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP. These figures are also integrated into the total project cost tables.

(e) Integration of ESMP with Project

- The Borrower's decision to proceed with a project, and the Bank's decision to support it, are predicated in part on the expectation that the ESMP (either stand alone or as incorporated into the ESCP) will be executed effectively. Consequently, each of the measures and actions

to be implemented will be clearly specified, including the individual mitigation and monitoring measures and actions and the institutional responsibilities relating to each, and the costs of so doing will be integrated into the project's overall planning, design, budget, and implementation.

C. Sample Template of Environmental and Social Management Plan (ESMP)

1. Subproject Information

Subproject Title:	
Estimated Cost:	
Start/Completion Date:	

2. Site/Location Description

This section concisely describes the proposed location and its geographic, ecological, social and temporal context including any offsite investments that may be required (e.g., access roads, water supply, etc.). Please attach a map of the location to the ESMP.

3. Subproject Description and Activities

This section lists all the activities that will take place under the subproject, including any associated activities (such as building of access roads or transmission lines, or communication campaigns that accompany service provision).

4. ESMP Matrix: Risk and Impacts, Mitigation, Monitoring

This section should identify anticipated site-specific adverse environmental and social risks and impacts; describe mitigation measures to address these risks and impact; and list the monitoring measures necessary to ensure effective implementation of the mitigation measures. It may draw from the ESMF's pre-identification of potential risks/impacts and mitigation measures, as applicable, and drill down further to ensure relevance and comprehensiveness at the site-specific level. For subprojects involving construction, two sets of tables may be needed, for the construction phase and the operation phase.

Anticipated E&S Risks and Impacts	Risk Mitigation and Management	Impact Mitigation		Impact/Mitigation Monitoring		
		Location/Timing/Frequency	Responsibility	Parameter to	Methodology,	Responsibility

	ent Measures			be monitor ed	including Location and Frequency	

5. Capacity Development & Training

Based on the implementation arrangements and responsible parties proposed above, this section outlines any capacity building, training or new staffing that may be necessary for effective implementation.

6. Implementation Schedule and Cost Estimates

This section states the implementation timeline for the mitigation measures and capacity development measures described above, as well as a cost estimate for the implementation. The cost estimate can focus on the line items that will be covered by the project implementing agency, with costs of mitigation measures to be implemented by the contractor left to the contractor to calculate.

7. Attachments

Sub-Management Plans and Forms, etc.

IV. Review & Approval

Prepared By: (Signature) Position: Date	
Reviewed By:(Signature) Position:Date	Approved By:(Signature)..... Position: Date

ANNEX 3. SAMPLE FORMAT FOR E&S PERIODIC SUBPROJECTS PROGRESS REPORTING (QUARTERLY, ANNUAL)

1. Format for Quarterly Project/Subproject Progress Report

- i. Period under Reporting.
- ii. Introduction to the Project/Subproject.
- iii. Project/Subproject Objective/Activity Information.
- iv. Achievement(s) made planned activity.
- v. Performance indicators and targets.
- vi. Challenges and Risks encountered during activity/activities implementation.
- vii. How were the challenges/risks addressed?
- viii. Project activity/activities planned for the second quarter and tentative timelines.
- ix. Annexes.

2. Guidelines/Format for Annual Project/Subproject Progress Report

- i. Financial Year under Reporting (On Cover Page).
- ii. Project No. and Title (On Cover Page).
- iii. Executive Summary.

- iv. Acronyms and Abbreviations.
- v. List of Tables.
- vi. List if Figures.
- vii. Introduction to the Project/Subproject.
- viii. Objective(s).
- ix. Activity Planned/Planned Achievement/Actual Achievement and Remarks/Achievement indicators (To be Presented in a Table Form).
- x. Challenges and Risks faced during Project implementation.
- xi. How were the challenges/risks addressed or Planned to be addressed during the second year?
- xii. Planned activities for the next financial year.
- xiii. Indicative list(s) of resources required.
- xiv. Conclusion and Recommendations
- xv. Annexes

ANNEX 4. ENVIRONMENTAL AND SOCIAL SPECIFICATIONS FOR CONTRACTORS

AIM OF THIS DOCUMENT The purpose of this document is to present a comprehensive set of specifications to be followed by Contractors in the implementation of subprojects under CRRN Project.

GENERAL

In order to prevent harm and nuisances on local communities, and to minimize the impacts on the environment during construction of investment sub-projects under the CRRN Project, the Contractor and his employees shall adhere to the mitigation measures set down in:

- ESIA
- Site Specific ESMP The specifications, procedures, and best practices included in this Annex. These specifications complement any technical specifications included in the work quantities and the requirements of Government of Mozambique regulations.
- Contractor's ESMP: The Contractor is required to submit a construction ESMP (CESMP)) as part of the proposed Construction Method Statements prepared as part of their Bid document and/or during construction phase. The Contractor's CESMP shall provide details such as Contractor's commitment to environmental protection; methodology of implementing the project ESMP; environmental mitigation measures and monitoring program during different stage of the construction period, and the contractor's proposed resources for the implementation of the ESMP.

The Contractor and his employees shall adhere to the mitigation measures set down in these specifications to prevent harm and nuisances on local communities, and to minimize the impacts in construction and operation on the environment.

SUBPROJECTS CONSTRUCTION ACTIVITIES

The following information is intended solely as broad guidance to be used in conjunction with local and national regulations and complemented by the Site Specific Environmental and Social Management Plans prepared for the project. Before initiation of rehabilitation activities, the Contractor shall present the PIU and Supervision Engineer/Consultant a Plan which explicitly states how he plans to abide by these specifications. After approval of such Plan by the PIU construction activities can proceed.

Workforce and Site Installation Management Plan

Workforce

There is the potential that local labor from the streets/villages around subproject area could participate in the project implementation activities. Priority shall be set by the Contactor(s) and sub-Contractor(s) to hire the local labor for the works. The contractor will not engage in child labor or forced labor. Based on the Labor Management Procedures (LMP) of the CRRN project the Contractor should prepare a Labor Management Plan (LMP) for his workers. The Contractor shall take the following steps to maximize to use of the local labor:

- Announcement for the position that local labor could participate in the works to every street/villages around the subproject area;
- Provide equal employment opportunities for both youth, women, men and disabled;
- Provide work safety/environmental awareness training to those local labors upon their hiring.

Code of Conduct

A Code of Conduct shall be established to outline the importance of appropriate behavior, drug and alcohol abuse, and compliance with relevant laws and regulations. Each employee shall be informed of the Code of Conduct and bound by it while in the employment of the Contractors. The Code of Conduct shall be available to local communities at the project information centers or other place easily accessible to the communities.

The Code of Conduct shall address the following measures (but not limited to them):

- All of the workforce shall abide by the laws and regulations of Mozambique;
- Reporting of work situations that are believed not to be safe or healthy;
- Treating other people with respect, and not discriminating against specific groups such as women, people with disabilities, migrant workers or children;
- Illegal substances, weapons and firearms shall be prohibited;
- Pornographic material and gambling shall be prohibited;
- Fighting (physical or verbal) shall be prohibited;
- Creating nuisances and disturbances in or near communities shall be prohibited;
- Disrespecting local customs and traditions shall be prohibited;
- Smoking shall only be allowed in designated areas;
- Maintenance of appropriate standards of dress and personal hygiene;
- Requirement of completion of relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation, and Sexual Abuse (SEA)
- Failure to comply with the Code of Conduct, or the rules, regulations, and procedures implemented at the construction camp will result in disciplinary actions.

Prohibitions

The following activities shall be prohibited on or near the project site.

- Cutting of trees for any reason outside the approved project area;
- Hunting, fishing, wildlife capture, or plant collection;
- Buying of wild animals for food;
- Feeding of wild animals;
- Use of unapproved toxic materials, including lead-based paints, asbestos, etc.;
- Disturbance to anything with architectural or historical value;
- Building of fires;
- Use of firearms;
- Use of alcohol by workers in office hours;
- Washing cars or machinery in streams or creeks;
- Doing maintenance (change of oils and filters) of cars and equipment outside authorized areas:
- Disposing trash in unauthorized places;
- Driving in an unsafe manner in local roads;
- Having caged wild animals (especially birds) in camps;
- Working without safety equipment (including boots and helmets);
- Creating nuisances and disturbances in or near communities;
- The use of rivers and streams for washing clothes;
- Indiscriminate disposal of rubbish or rehabilitation wastes or rubble;
- Littering the site;
- Spillage of potential pollutants, such as petroleum products;
- Collection of firewood;
- Poaching of any description;
- Explosive and chemical fishing;
- Use of latrine outside the designated facilities;
- Burning of wastes and/or cleared vegetation;
- Engaging in any form of sexual harassment including unwelcome sexual advances, requests for sexual favours, and other unwanted verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
- Engaging in sexual exploitation, rape or sexual abuse;
- Engaging in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage.

Any rehabilitation workers, office staff, Contractor's employees, the implementing agencies employees or any other person related to the project found violating these prohibitions will be subjected to disciplinary actions that can range from a simple reprimand to termination of his/her employment depending on the seriousness of the violation.

Camp and Site Facilities

If applicable, the following general measures shall be considered for camp and site facilities:

- The construction, layout and extent of the construction site and its components, i.e. all offices, accommodation facilities, testing facilities / laboratories, batching areas, storage & stockpiling areas, workshops, vehicle washing areas and all other areas/facilities required for completion of the project shall be planned, designed and managed in such a manner that environmental and social impacts are minimized;
- The Contractor shall establish worker's camps, offices, workshops, testing facilities, stockpiling areas, staff accommodation etc. in a manner that does not adversely affect the environment.
- Observe applicable national (if any) and international standards on how many workers are allowed in one room, what minimum space required per person, type of beds, cooking arrangements etc.
- Site offices, camps, depots, asphalt plants, mixing stations, and workshops shall be located in appropriate areas as agreed by local village and approved by the Supervision engineer/Consultant and not within 500 meters of existing residential settlements and not within 1,000 meters for asphalt plants;
- Site offices, camps, depots and particularly storage areas for fuel, lubricants, bitumen and asphalt plants shall not be located within 500 meters of watercourses, and be operated so that no pollutants enter watercourses, either overland or through groundwater seepage, especially during periods of rain. This will require lubricants to be recycled and a ditch to be constructed around the area with an approved settling pond/oil trap at the outlet;
- Areas for the storage of fuel or lubricants and for a maintenance workshop shall be fenced and have a compacted/impervious floor to prevent the escape of accidental spillage of fuel and or lubricants from the site. Surface water drainage from fenced areas shall be discharged through purpose designed and constructed oil traps. Empty fuel or oil drums may not be stored on site.
- Fuel wood shall not be used as a means of heating during the processing or preparation of any materials forming part of the Works;
- The Contractor shall restrict all his activities, materials, equipment and personnel to the area specified. Entry into restricted areas by any person, vehicle or equipment without the Supervision Engineer's/Consultant's permission can result in penalties;
- Potable water safe for human consumption shall be provided for at camps, site offices, and other working areas;
- Camp areas shall be located to allow effective natural drainage;
- A method shall be established for storing and disposing of all solid wastes generated by the labor camp. If applicable, kitchen wastes shall be disposed into soak pits;
- Solid wastes generated in the labor site shall be reused if recyclable or disposed of in land fill sites;
- If water is stored on site, drinking water and multi-purposed water storage facilities shall be clearly distinguished and demarcated.
- Sanitary arrangements, latrines and urinals shall be provided in every camp sites/work fronts.

First Aid Facilities

- Medical and first aid facilities shall be provided at each camp area. In line with Occupational Health and Safety (First aid And Welfare Facilities) Rules, 2015, First aid boxes shall be provided at the construction campsite and under the charge of a responsible person who shall always be readily available 24 hours. He/she shall be adequately trained in administering first aid treatment. Formal arrangements shall be prescribed to make motor transport available to carry an injured person or person suddenly taken ill to the nearest hospital.

Sanitary Facilities

- In every camp site separate and adequate lavatory facilities (toilets and washing areas) shall be provided for the use of male and female workers. Toilet facilities should also be provided with adequate supplies running water, soap, and toilet paper. Such facilities shall be conveniently accessible and shall be kept in clean and hygienic conditions:
 - ✓ o Where female workers are employed, there shall be at least one latrine for every 25 females or part thereof.
 - ✓ o Where males are employed, there shall be at least one latrine for every 25 males or part thereof.
 - ✓ o Every latrine shall be under cover and so partitioned off as to secure privacy and shall have a proper door and fastenings.
 - ✓ o Where workers of both sexes are employed, each latrine or urinal must be lockable from inside, and outside of each block there must be a notice in the language understood by the majority of the workers “For Men” or “For Women” as the case may be.
 - ✓ The latrines and urinals shall be adequately lighted and shall be maintained in a clean sanitary condition at all times and o Water shall be provided in or near the latrines and urinals by storage in drums.
- Chemical toilets, etc. must be provided at all construction camp areas where there will be a concentration of labor. Toilet paper must be provided;
- A temporary septic tank system shall be installed for the disposal of domestic wastes and excreta without causing pollution of nearby watercourses. Wastewater should not be disposed into water bodies without treatment.

Eating areas

- If none is available, the Contractor shall provide adequate temporary shade within the rehabilitation areas to ensure that site personnel do not move off site to eat;
- The Contractor shall provide adequate refuse bins at all eating areas to the satisfaction of the Supervision engineer/Consultant;
- If deemed necessary by the Supervision engineer/Consultant, the Contractor shall demarcate designated eating areas.

Security

Security measures shall be put into place to ensure the safe and secure running of the site facilities and its residents. Some of these security measures include:

- Adequate, day-time night-time lighting shall be provided;
- A perimeter security fence at least 2m in height constructed from appropriate materials;
- Provision and installation in all buildings of firefighting equipment and portable fires extinguishers.

E&S Impact Management Plan

Erosion and Sedimentation

In order to minimize negative impacts in the project area, the following activities shall be carried out by the Contractor:

- The Contractor shall implement erosion and sedimentation control measures to the satisfaction of the PIU and Supervision engineer/Consultant;
- The Contractor shall protect all areas susceptible to erosion by installing necessary temporary and permanent drainage works as soon as possible and by taking any other measures necessary to prevent storm water from concentrating in streams and scouring slopes, banks, etc.
- Areas of the site not disturbed by rehabilitation activities shall be maintained in their existing conditions; • Conserve topsoil with its leaf litter and organic matter, and reapply this material to local disturbed areas to promote the growth of local native vegetation;
- Apply local, native grass seed and mulch to barren erosive soil areas or closed construction surfaces;
- Apply erosion control measures before the rainy season begins preferably immediately following rehabilitation;
- Install sediment control structures where needed to slow or redirect runoff and trap sediment until vegetation is established. Sediment control structures include windrows of logging slash, rock berms, sediment catchment basins, straw bales, brush fences, and silt;
- In areas where rehabilitation activities have been completed and where no further disturbance would take place, re-vegetation should commence as soon as possible;
- Spray water as needed on dirt roads, cuts, fill material and stockpiled soil to reduce wind-induced erosion;
- Traffic and movement over stabilized areas shall be restricted and controlled, and damage to stabilized areas shall be repaired and maintained to the satisfaction of the Supervision engineer/Consultant.

Earthworks, Cut and Fill Slopes

All earthworks shall be properly controlled, especially during the rainy season;

- The Contractor shall maintain stable cut and fill slopes at all times and cause the least possible disturbance to areas outside the prescribed limits of the works;
- In order to protect any cut or fill slopes from erosion, in accordance with the drawings, cut off drains and toedrain shall be provided at the top and bottom of slopes and be planted with grass or other plant cover. Cut off drains should be provided above high cuts to minimize water runoff and slope erosion;
- Any excavated cut or unsuitable material shall be disposed of in designated disposal areas as agreed to by the Supervision engineer/Consultant;
- Disposal sites should not be located where they can cause future slides, interfere with agricultural land or any other properties, or cause soil from the dump to be washed into any watercourse. Drains may need to be dug within and around the tips, as directed by the Engineer

Stockpiles and Borrow Pits

In general terms, the Contractor shall:

- Identify and demarcate locations for stockpiles and borrow pits, ensuring that they are 15 meters away from critical areas such as steep slopes, erosion-prone soils, and areas that drain directly into sensitive water bodies. Location of borrow pits shall be approved by the Supervision engineer/Consultant.
- Limit extraction of material to approved and demarcated borrow pits.
- Stockpile topsoil when first opening the borrow pit. After all usable borrow has been removed, the previously stockpiled topsoil should be spread back over the borrow area and graded to a smooth, uniform surface, sloped to drain. On steep slopes, benches or terraces may have to be specified to help control erosion.
- Excess overburden should be stabilized and re-vegetated. Where appropriate, organic debris and overburden should be spread over the disturbed site to promote re-vegetation. Natural re-vegetation is preferred to the extent practicable.
- Existing drainage channels in areas affected by the operation should be kept free of overburden.
- The Contractor shall ensure that all borrow pits used are left in a trim and tidy condition with stable side slopes, re-establishment of vegetation, restoration of natural water courses, avoidance of flooding of the excavated areas wherever possible so no stagnant water bodies are created which could breed mosquitoes.
- When the borrow pits cannot be refilled or reasonably drained, the Contractor shall consult with the local community to determine their preference for reuse such as fish farming or other community purposes;

- No foreign material generated/ deposited during construction shall remain on site. Areas affected by stockpiling shall be reinstated to the satisfaction of the Supervision Engineer/Consultant.

Disposal of Debris

The Contractor shall carry out the following activities:

- Establish and enforce daily site clean-up procedures, including maintenance of adequate disposal facilities for debris;
- Debris generated due to the dismantling of existing structures shall be suitably reused, to the extent feasible, in the proposed rehabilitation program (e.g. as fill materials for embankments). The disposal of remaining debris shall be carried out only at sites identified and approved by the Supervision Engineer/Consultant. The contractor should ensure that these sites (a) are not located within designated forest areas; (b) do not impact natural drainage courses; and (c) do not impact endangered/rare flora. Under no circumstances shall the contractor dispose of any material in environmentally sensitive areas.
- In the event any debris or silt from the sites is deposited on adjacent land, the Contractor shall immediately remove such, debris or silt and restore the affected area to its original state to the satisfaction of the Supervision Engineer/Consultant.
- Water courses shall be cleared of debris and drains and culverts checked for clear flow paths;
- Include provisions for incorporating the most appropriate stabilization techniques for each disposal site and determine that the selected spoil disposal sites do not cause unwanted surface drainage;
- Assess risk of any potential impact regarding leaching of spoil material on surface water;
- Once the job is completed, all rehabilitation -generated debris should be removed from the site.

Demolition of Existing Infrastructures

The following measures shall be implemented in order to protect workers and the public from falling debris and flying objects:

- Set aside a designated and restricted waste drop or discharge zones, and/or a chute for safe movement of wastes from upper to lower levels;
- Conduct sawing, cutting, grinding, sanding, chipping or chiselling with proper guards and anchoring as applicable;
- Maintain clear traffic ways to avoid driving of heavy equipment over loose scrap;
- Provide all workers with safety glasses with side shields, face shields, hard hats, and safety shoes.

Dust Control

- The Contractor shall ensure that the generation of dust is minimized and shall implement a dust control program to maintain a safe working environment, minimize nuisance for surrounding residential areas/dwellings and protect damage to natural vegetation, crops, etc.;
- Construction vehicles shall comply with speed limits and haul distances shall be minimized;
- Material loads shall be suitably covered and secured during transportation;
- Exposed soil and material stockpiles shall be protected against wind erosion and the location of stockpiles shall take into consideration the prevailing wind directions and locations of sensitive receptors; and
- The Contractor shall implement dust suppression measures (e.g. water spray vehicles, covering of material stockpiles, etc.) if and when required.

Noise Control

The Contractor shall be responsible for compliance with the relevant legislation with respect to noise;

- The Contractor shall try to keep noise generating activities to a minimum;
- The Contractor shall restrict all operations that result in undue noise disturbance to local communities and/or dwellings (e.g. blasting, crushing, etc.) to daylight hours on weekdays or as agreed with the Supervision Engineer/Consultant;
- The Contractor shall warn any local communities and/or residents that could be disturbed by noise generating activities such as blasting well in advance and shall keep such activities to a minimum;
- In sensitive areas (including residential neighbourhoods, hospitals, rest homes, schools, etc.) more strict measures may need to be implemented to prevent undesirable noise levels;
- To the extent possible, nighttime operations shall be kept to a minimum and banned near sensitive receptors;
- No blasting shall be allowed during nighttime unless prior approval is obtained from the government authority and the Supervision Engineer/Consultant; and
- The Contractor shall maintain the construction equipment in its best operating conditions and lowest noise levels possible.

Vegetation and site restoration

- Re-vegetation shall start at the earliest opportunity. Appropriate local native species of vegetation shall be selected for the compensatory planting and restoration of the natural landforms;
- Restoration of cleared areas such as borrow pits no longer in use, disposal areas, site facilities, stockpiles areas, working platforms and any areas temporarily occupied during construction of the project works shall be accomplished using landscaping adequate drainage and re-vegetation;
- Spoil heaps and excavated slopes shall be re-profiled to stable batters, and grassed to prevent erosion;
- Restoration and re-vegetation shall be carried out timely for the exposed slopes/soils and finished areas shall be reinstated in order to achieve the stability of slopes and maintain soil integrity;
- All affected areas shall be landscaped and any necessary remedial works shall be undertaken without delay, including grassing and reforestation; and

- Soil contaminated with chemicals or hazardous substances shall be removed and transported and buried in waste disposal areas.

Waste Management Plan

- Waste management on site shall be strictly controlled and monitored. Only approved waste disposal methods shall be allowed. The Contractor shall ensure that all site personnel are instructed in the proper disposal of all waste.

Solid waste

- The Contractor shall submit a method statement detailing a solid waste control system (storage, provision of bins, site clean-up schedule, bin clean-out schedule, etc.) to the Supervision Engineer/Consultant for approval.
- The Contractor shall ensure that all facilities are maintained in a neat and tidy condition and the site shall be kept free of litter;
- Measures shall be taken to reduce the potential for litter and negligent behaviour with regard to the disposal of all refuse. At all places of work, the Contractor shall provide litter bins, containers and refuse collection facilities for later disposal;
- Solid waste may be temporarily stored on site in a designated area approved by the Supervision Engineer/Consultant prior to collection and disposal through a licensed waste collector;
- Waste storage containers shall be covered, tip-proof, weatherproof and scavenger proof. The waste storage area shall be fenced off to prevent wind-blown litter;
- No burning, on-site burying or dumping of waste shall occur;
- All solid waste shall be disposed of offsite at an approved landfill site. The Contractor shall supply the Supervision Engineer/Consultant with certificates of disposal;
- Random disposal of solid waste in scenery areas shall be strictly prohibited;
- During rehabilitation, inert construction materials / excavated soil shall be reused on site as much as possible and minimize the volume requiring disposal;
- The Contractor shall identify and demarcate disposal areas clearly indicating the specific materials that can be deposited in each; and
- Recyclable materials such as wooden plates for trench works, steel, scaffolding material, site holding, packaging material, etc. shall be collected and separated on-site from other waste sources. Collected recyclable material shall be re-used for other projects or sold to waste collector for recycling.

Domestic waste

- The Contractor shall provide refuse bins, all with lids, for all buildings. Refuse shall be collected and removed from all facilities at least twice per week. Domestic waste shall be transported to the approved refuse disposal site in covered containers or trucks.

Wastewater

- The Contractor shall submit a method statement to the Supervision Engineer/Consultant detailing how wastewater would be collected from all wastewater generating areas, as well

as storage and disposal methods. If the Contractor intends to carry out any on-site wastewater treatment, this should also be included;

- Water from kitchens, showers, laboratories, sinks etc. shall be discharged into a conservancy tank for removal from the site;
- Runoff from fuel depots / workshops / machinery washing areas and concrete batching areas shall be collected into a conservancy tank and disposed off at a site approved by the Supervision Engineer/Consultant;
- Domestic sewage from site office and toilets shall either be collected by a licensed waste collector or treated by on-site treatment facilities. Discharge of treated wastewater must comply with the discharge limit according to the legislation;
- Chemical toilets can be provided on site for construction workers. Domestic sewage collected from the site office and chemical toilets shall be cleaned up on regular basis. Only licensed waste collectors shall be employed for this disposal;
- At completion of rehabilitation works, soak pits and septic tanks shall be covered and effectively sealed off.

Hazardous and Chemical waste

- All hazardous and chemical waste (including bitumen, etc.) shall be disposed of at an approved hazardous landfill site and in accordance with local legislative requirements. The Contractor shall provide disposal certificates to the Supervision Engineer/Consultant;
- The removal of asbestos-containing materials or other toxic substances shall be performed and disposed of by specially trained workers;
- Used oil and grease shall be removed from site and sold to an approved used oil recycling company;
- Under no circumstances shall the spoiling of tar or bituminous products be allowed on the site, over embankments, in borrow pits or any burying;
- Unused or rejected tar or bituminous products shall be returned to the supplier's production plant;
- Used oil, lubricants, cleaning materials, etc. from the maintenance of vehicles and machinery shall be collected in holding tanks and sent back to the supplier or removed from site by a specialist oil recycling company for disposal at an approved hazardous waste site.
- Inform the Supervision Engineer/Consultant of any accidental spill or incident;
- Initiate a remedial action following any spill or incident;
- Provide a report explaining the reasons for the spill or incident, remedial action taken, consequences/damage from the spill, and proposed corrective actions.

Materials Handling, Use and Storage Management Plan

General

The Contractor shall submit a method statement detailing cement storage, concrete batching areas and methods, method of transport of cement and concrete, storage and disposal of used cement bags, etc. for each concrete batching operation. Environmental considerations shall be taken into account in the location of any material storage areas.

Transportation

- The Contractor shall ensure that all suppliers and their delivery drivers are aware of procedures and restrictions (e.g. restricted areas);
- Material shall be appropriately secured to ensure safe passage between destinations during transportation;
- Loads shall have appropriate cover to prevent them spilling from the vehicle during transit;
- The Contractor shall be responsible for any clean-up resulting from the failure by his employees or suppliers to properly secure transported materials.
- Transport vehicle e.g. dumper, book truck and any equipment as may be required for offloading heavy objects should have safety equipment like cones, first aid kit, fire extinguisher, etc. as per the requirements of part 8 of The Occupational Safety and Health (Building and Construction Industry) Rules, 2015.

Hazardous and Chemical Substances

The Contractor shall provide a method statement detailing the hazardous substances/material that are to be used during construction, as well as the storage, handling, and disposal procedures for each substance / material and emergency procedures in the event of misuse or spillage that might negatively affect the environment.

In general terms, the following activities shall be carried out:

- All hazardous material/substances (e.g. petrochemicals, oils, etc.) shall be stored on site only under controlled conditions;
- All hazardous material/substances shall be stored in a secured, appointed area that is fenced and has restricted entry. All storage shall take place using suitable containers to the approval of the Supervision Engineer/Consultant;
- Hazard signs indicating the nature of the stored materials shall be displayed on the storage facility or containment structure;
- Fuel shall be stored in a steel tank supplied and maintained by the fuel suppliers. The tank shall be located in a secure, demarcated area and should be contained by dykes than can hold 100% of the volume of the fuel stored.

Surfacing Materials

- Over spray of bitumen products outside of the road surface and onto roadside vegetation shall be prevented using a method approved by the Supervision Engineer/Consultant;
- When heating of bitumen products, the Contractor shall take appropriate fire control measures; Stone chip / gravel excess shall not be left on road / paved area verges. This shall be swept /raked into piles and removed to an area approved by the Supervision Engineer/Consultant; and
- Water quality from runoff from any fresh bitumen surfaces shall be monitored by the Supervision Engineer/Consultant and remedial actions taken where necessary.

Cement and Concrete Batching

- Concrete mixing directly on the ground shall not be allowed and shall take place on impermeable surfaces to the satisfaction of the Supervision Engineer/Consultant;
- All runoff from batching areas shall be strictly controlled, and cement-contaminated water shall be collected, stored and disposed of at a site approved by the Supervision Engineer/Consultant;

- Unused cement bags shall be stored out of the rain where runoff won't affect it;
- Used (empty) cement bags shall be collected and stored in weatherproof containers to prevent windblown cement dust and water contamination. Used cement bags shall not be used for any other purpose and shall be disposed of on a regular basis via the solid waste management system (see Waste Management Plan); and
- All excess concrete shall be removed from site on completion of concrete works and disposed of. Washing of the excess into the ground is not allowed. All excess aggregate shall also be removed.

Loading/Unloading Activities

The project will use large RCC pipes for drainage projects. This is a very risky activity and needs specifications for crane operation (e.g. licensed operator), lifting gear (e.g. use of two belts, not a single belt), flagmen, etc. The Contractor will be required to describe in their HSMP how both mechanical and manual handling will be done.

Ecological Considerations

Protection of Natural Vegetation

- The Contractor shall be responsible for informing all employees about the need to prevent any harmful effects on natural vegetation on or around the rehabilitation site as a result of their activities;
- Clearing of natural vegetation shall be kept to a minimum;
- The removal, damage and disturbance of natural vegetation without the written approval of the Supervision Engineer/Consultant are prohibited;
- The use of herbicides shall be approved by the Supervision Engineer/Consultant;
- Regularly check the work site boundaries to ensure that they are not exceeded and that no damage occurs to surrounding areas;
- Prohibit and prevent open fires during rehabilitation and provide temporary firefighting equipment in the work areas, particularly close to forest areas; and
- Some trees might be of value for the communities and may not be cut, disturbed, damaged, destroyed and their products may not be possessed, collected, removed, transported, exported, donated, purchased or sold except under license granted a delegated authority.

Protection of Fauna

- The Contractor shall ensure that no hunting, trapping, shooting, poisoning or otherwise disturbance of any fauna takes place;
- The feeding of any wild animals shall be prohibited;
- The use of pesticides shall be approved by the Supervision Engineer/Consultant; and
- No domestic pets or livestock shall be permitted on site.

Safety during Construction

Construction Site Safety

The Contractor's responsibilities include the protection of every person and nearby property from construction accidents. The Contractor shall be responsible for complying with all national and local safety requirements and any other measures necessary to avoid accidents, including the following:

- Provide personal protective equipment and clothing (goggles, gloves, respirators, dust masks, hard hats, steeltoed boots, etc.) for construction workers and enforce their use;
- During heavy rains or emergencies of any kind, suspend all work;
- Brace electrical and mechanical equipment to withstand seismic events during the construction;
- Present details regarding maximum permissible vehicular speed on each section of road;
- Establish safe sight distance in both construction areas and construction camp sites;
- Place signs around the rehabilitation areas to facilitate traffic movement, provide directions to various components of the works, and provide safety advice and warning. All signs shall be in English and Swahili language and be constructed according to Tanzanian specifications.

Measures on blasting (if applicable)

- The Contractor shall take necessary precautions to prevent damage to special features and the general environment;
- Environmental damage caused by blasting/drilling shall be repaired at the Contractor's expense to the satisfaction of the Supervision Engineer/Consultant;
- The Contractor shall notify any occupants / owners of surrounding land at least one week prior to blasting and shall address any concerns that they may have to the satisfaction of the Supervision Engineer/Consultant; and
- For the transportation, storage, process, package on site, connect, blasting and the disposal of the blasting, the procedure shall be in accordance with the relevant Tanzania Regulations.

Fire Control

- The Contractor shall submit a fire control and fire emergency method statement to the Supervision Engineer/Consultant for approval. The method statement shall detail the procedures to be followed in the event of fire;
- The contractor shall take all reasonable steps to avoid increasing the risk of fire through activities on site;
- The contractor shall ensure that basic fire-fighting equipment is available at all camp areas and facilities;
- The contractor shall appoint a fire officer who shall be responsible for ensuring immediate and appropriate action in the event of a fire;
- The contractor shall ensure that all site personnel are aware of the procedure to be followed in the event of a fire; and
- Any work that requires the use of fire may only take place at a designated area approved by the Supervision Engineer/Consultant and must be supervised at all times. Fire-fighting equipment shall be available.

Traffic Management

- Estimate maximum concentration of traffic (number of vehicles/hour);
- Use selected routes to the project site, as agreed with the Supervision Engineer/Consultant, and appropriately sized vehicles suitable to the class of roads in the area, and restrict loads to prevent damage to local roads and bridges used for transportation purposes;

- Maintain adequate traffic control measures throughout the duration of the Contract and such measures shall be subject to prior approval of the Supervision Engineer/Consultant;
- Carefully and clearly mark pedestrian-safe access routes;
- If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours; and
- Maintain a supply for traffic signs (including paint, easel, sign material, etc.), road marking, and guard rails to maintain pedestrian safety during construction.

Other Requirements

As indicated in section xx of the ESMF, Contractors will be required to include in their HSMPs safety measures in different activities including the following:

- Excavations.
- Working from height.
- Working in confined spaces.
- Housekeeping.
- Other general work (hot work, power tool safety, electrical work, tagging system, etc.).
- Permit-to-work system.

Protection of Heritage and Cultural Property

- If any archaeological or paleontological artefact or remains are uncovered during rehabilitation activities, work in the vicinity of the find shall cease immediately. The Contractor shall immediately notify the Supervision Engineer/Consultant who shall contact the Provincial Culture Department;
- The Contractor will be required to abide by the specifications as set out by the heritage specialist appointed to investigate the find; and
- The Contractor may not, without a permit issued by the relevant heritage resources authority, destroy, damage, excavate, alter, deface or otherwise disturb archaeological material.

Grievance Redress Mechanism (GRM)

The contractor shall develop a GRM for workers and community members to express concerns about the civil works. The GRM system should be easily accessible. For GBV cases, the GRM shall be designed in a way to keep strict confidentiality. All workers shall be trained about the GRM process and the contractor shall prove that each employee has been inducted with signatures to show that they have been inducted on the procedure. If the dispute is not resolved at the workplace, other resolutions mechanisms provided for in the labor legislations can be utilized.

All complaints received shall be recorded. The supervision engineer/consultant and PIU should be informed about the complaints when they are received. A mechanism shall be put in place to resolve the complaint swiftly. For complaints by community members if a resolution is not possible, the complaint shall be dealt with through the GRRN Project GRM system.

Community Relations

To enhance community relations the Contractor shall:

- Inform the local communities about construction and work schedules, blasting schedules, interruption of services, traffic detour routes and provisional bus routes, and demolition, as appropriate.
- Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures.
- Inform local community as early as possible and repeat at least one day in advance of any service interruption (including water, electricity, telephone, and bus routes) the community must be advised through postings at the project site, at bus stops, and in affected homes/businesses.
- All community infrastructures such as roads, bridges, water supply systems, micro-power generators, boat landings, irrigation systems, etc. affected during construction must be restored to the satisfaction of the communities and approved by the Supervision Engineer.
- All local roads used or by-passed by the Contractor will need to be rehabilitated to their original conditions.
- Establish and maintain a unit to receive, process and reach resolution on community complaints arising from construction activities (Grievance Redress Mechanism). Records of such complaints and their resolution must be kept and be available for review by the Supervision Engineer/Consultant and PIU.

Health Services, HIV/AIDS and COVID-19 Education

The Contractor shall provide basic first aid services to the workers as well as emergency facilities for work related accidents including medical equipment suitable for treatment likely to be required prior to transportation to hospital. The Contractor shall be responsible for implementing a program for the detection screening of sexually transmitted diseases, especially regarding HIV/AIDS, amongst laborers. The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority. The Contractor shall send to the Supervision Engineer/Consultant details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning the health, safety and welfare of persons, and damage to property, as the Engineer may reasonably require. The Contractor shall conduct an HIV-AIDS awareness program via an approved service provider and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the HIV virus between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals. The Contractor shall conduct information and education campaigns addressed to all the site staff and labor (including all the Contractor's employees, all Sub-Contractors and Consultants' employees, and all truck drivers and crew making deliveries to site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behaviour with respect to of Sexually Transmitted Diseases (STD)-or Sexually Transmitted Infections. The Contractor shall also provide awareness on COVID-19 as well as putting in place necessary precautionary and emergency facilities for COVID-19 as per the national guidelines.

Environmental Emergency Procedures

The possibility exists for environmental emergencies of an unforeseen nature to occur during the course of the construction and operational phases of the project;

- By definition, the nature of such emergencies cannot be known. Therefore, the Contractor shall respond on a case-by-case basis to such emergencies and shall initiate event-specific measures in terms of notifications and reactions;
- The Contractor shall prepare a report on the incident detailing the accident, clean-up actions taken, any pollution problems and suggested measures to prevent similar accidents from happening again in future. The incident report shall then be submitted to the Supervision Engineer/Consultant and PIU for review and records.

Environmental Training and Awareness

The Contractor should ensure that all concerned staff are aware of the relevant environmental requirements as stipulated in local environmental legislation and the Contract specifications. The Contractor is responsible for providing appropriate training to all staff. This should be tailored to suit their level of responsibility for environmental matters. The Contractor should also ensure that all site staff members are aware of the emergency response procedures. All staff should receive environmental induction training and managerial staff should receive additional training. The training materials should be reviewed by the Supervision Engineer/Consultant. Additional refresher training may be provided and this should be scheduled following periodic internal review of requirements for the Project activity. Records should be maintained for staff environmental training. Records should be kept on site where possible for each project activity for easy access during site audits or enquiries. Environmental training records (e.g. attendance records for environmental awareness training, topics covered) should be kept.

Remedial Actions

Remedial actions which cannot be effectively carried out during construction should be carried out on completion of the works (and before issuance of the acceptance of completion of works):

- All affected areas should be landscaped, and any necessary remedial works should be undertaken without delay, including grassing and reforestation.
- Water courses should be cleared of debris and drains and culverts checked for clear flow paths.
- All sites should be cleaned of debris and all excess materials properly disposed.
- Borrow pits should be restored prior to formal contract closure.

ANNEX 5. SAMPLE GRIEVANCE REDRESS FORMS

Grievance Report Form

A unique code should be assigned to each complainant / or Project Affected Person (PAP) at the first time they report a concern, and the same code should be used for all future concerns reported by the same person.

1. INCIDENT INFORMATION

1.1 Received By:	1.2 Date received:	1.3 Reported by:
1.4 Grievance category - <i>(Circle as appropriate)</i> <i>(Compensation/Land access/Inadequate Notification/Disruption to business or property/ Property damage/Environmental damage/Safety Risk/Traffic/Boundary Dispute/Other)</i>		
1.5 Project Related? Yes: <input type="checkbox"/> No: <input type="checkbox"/> <i>- If the grievance is not related to the project do not continue.</i>	1.6 Date of the report to Contractor:	1.7 Date of the report to ANE, IP:
1.8 Case ID:	1.9 Location	1.10 District:
1.11 Contract Number:		1.12 Name of the contractor:

3.6 Risk of retaliation: Yes: <input type="checkbox"/> No: <input type="checkbox"/>	
3.7 Description of concern:	
2. RESOLUTION FEEDBACK	
2.1 Complainant satisfied with process? Yes: <input type="checkbox"/> NO: <input type="checkbox"/>	Why not?
2.2 Complainant satisfied with outcome? Yes: <input type="checkbox"/> NO: <input type="checkbox"/>	Why not?
2.3 Other relevant information:	

3. ACTION TAKEN TO RESOLVE THE COMPLAINT		
Reported to	Date Reported	Action Taken
Print name (complainant):		
Signed (complainant)		Date:
Signed (Grievance Focal Point)		Date:
Copied to:		

Name _____ (Complainant):

PAPs _____ ID _____ Number: _____

Contact Information (Community; mobile phone): _____

Nature of Grievance or Complaint:

Date _____ Individuals _____ Contacted: _____

Summary of Discussion _____

Signature PAP: _____ Date: _____

(If relevant) - RAP Consultant representative: _____ Date: _____

Local Authorities: _____ Date: _____

Grievance Resolution Section

Name & Position of Reporting Person: _____

Review/Resolution Date of Meeting on Grievance:

People Present at Meeting (Attach Attendance/ Sing-in List):

Was field verification of complaint conducted? Yes ___ No ___

Findings of field investigation:

Summary of Conclusions from the Meeting:

Key

Issues:

Was agreement reached on the issues? Yes _____ No _____

If agreement was reached, detail the agreement below: If agreement was not reached, specify the points of disagreement below and Next Action Step Agreed:

Signed (Conciliator): _____

Signed

(person):

Signed (Independent Observer): _____ Date: _____

ANNEX 6. STAKEHOLDER CONSULTATIONS DOCUMENTATION – PHASE 1: JAN.15 – FEB 02, 2024

Summary of Stakeholders Consulted, Summary of Issues raised and responses provided; Attendance List of participants and Sample Photographs.

A. List of Stakeholders Met, Dates of Meetings and Gender Segregation of Attendance in Maputo and Pemba

#	Institution met	Location	Date	Nr. of participants	
				Male	Female
1	National Road Administration (ANE, IP)	Maputo	15/01/2024	2	1
2	National Institute of Statistics (INE)	Maputo	15/01/2024	1	0
3	National Institute of Meteorology (INAM)	Maputo	16/01/2024	4	0
4	National Emergency Operations Centre (CENOE), of the National Institute for Disaster Management (INGD)	Maputo	16/01/2024	1	1
5	Ministry of Transport and Communication (MTC)	Maputo	17/01/2024	5	1
6	Ministry of Land and Environment (MTA)	Maputo	18/01/2024	1	0
7	Ministry of Labor, Employment and Social Security (MITSS)	Maputo	19/01/2024	2	1
8	Post-Cyclone Reconstruction Office (GREPOC)	Maputo	25/01/2024	1	1
9	ANE, IP provincial delegation	Pemba	17/01/2024	2	1
10	Provincial Directorate of Health (DPS)	Pemba	18/01/2024	2	0
11	Provincial Police Command (PRM)	Pemba	18/01/2024	2	0
12	Provincial Directorate of Industry and Commerce (DPIC)	Pemba	18/01/2024	1	1
13	Provincial Environment Services (SPA)	Pemba	19/01/2024	2	0
14	Provincial Directorate of Gender, Children and Social Action (DPGCAS)	Pemba	19/01/2024	2	1

15	United Nations Office for Project Services (UNOPS) through the security specialist in Pemba	Pemba	19/01/2024	1	0
16	Provincial Directorate of Transport and Communications (DPTC)	Pemba	18/01/2024	4	0
17	Provincial delegation of National Institute for Disaster Management (INGD)	Pemba	19/01/2024	1	0
18	Provincial Directorate of Agriculture and Fisheries (DPAP)	Pemba	19/01/2024	3	1
19	Ministry of Agriculture and Rural Development (MADER)	Maputo	30/01/2024	3	1
20	National Administration of Conservation Areas (ANAC)	Maputo	1/02/2024	1	0
Total				41	10

The table below summarize the number of participants of the consultation workshop in Pemba, Nampula and Lichinga on February 21 and 23.

Province	Women	Men	Total
Cabo Delgado (Pemba)	4	9	13
Nampula	2	18	20
Niassa (Lichinga)	4	17	21
Total	10	44	54

B. Key Issues raised, and Responses Provided

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
1	National Road Administration (ANE, IP)	Maputo	15/01/2024	2	1	<ul style="list-style-type: none"> • Presentation of the JV team (JBN and EA) and the objectives of the consultations meetings to be carried out between the 15th and 19th of January. • Support to be provided by ANE, IP. • Meetings already confirmed with institutions, both in Maputo and Cabo Delgado. 	<ul style="list-style-type: none"> • ANE, IP made two staff members available to attend the meetings in Maputo. • Provided the list of institutions that confirmed the meetings in Maputo and Pemba.
2	National Institute of Statistics (INE)	Maputo	15/01/2024	1	0	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • Security statistics for the northern region of the country (Cabo Delgado, Niassa and Nampula). • Statistics on crime and justice. • Statistics of general population census. • Statistics on gender-based violence. 	<ul style="list-style-type: none"> • INE has a report on crime and justice, to be provided in digital format. • Statistics on security are not part of data generated by INE. • The demographic health survey report is available and has information on gender-based violence. • There is also a survey report on family budget, with data disaggregated by province, rural and urban level.
3	National Institute of Meteorology (INAM)	Maputo	16/01/2024	4	0	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • Data on tropical cyclones occurring in the last 20, 10 or 5 years. • Provinces prone to the effects of tropical cyclones. • Technical specifications recommended for road and bridge works for climate resilience. • Areas most prone to flooding in Cabo Delgado, Niassa and Nampula. 	<ul style="list-style-type: none"> • INAM has data on cyclones that have already occurred and will provide. • Rainfall data exists and can be provided. However, there is a limitation that INAM does not have meteorological stations in all areas of the country. • There are no specific technical specifications for roads/bridges, but there is a manual for building climate-resilient schools, which was developed by UN-Habitat with intervention from INAM. TUN-Habitat should be contacted for access.

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
							<ul style="list-style-type: none"> • For areas prone to flooding ANE, IP should contact National Directorate of Water Resources Management (DNGRH). • ANE, IP sent formal request of data to INAM indicating the following: (i) Number of tropical cyclones that hit Cabo Delgado, Nampula and Niassa in the last 20 years and affected districts; (ii) Wind speed and rainfall volume for the period of occurrence of each cyclone; (iii) Trajectory maps of the same tropical cyclones that hit the three provinces; (iv) Districts of Cabo Delgado, Nampula and Niassa vulnerable to being affected by tropical cyclones.
4	National Emergency Operations Centre (CENOE), of the National Institute for Disaster Management (INGD)	Maputo	16/01/2024	1	1	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • INGD major role. • Technical specifications for roads and bridges. • Capacity of the INGD on E&S issues. 	<ul style="list-style-type: none"> • INGD major role is coordination with other institutions and sectors aligned with the nature of a disaster. • Depending on the nature and magnitude of the emergency, high risk emergencies are commanded by the President or Prime Minister. • Responding to all types of emergencies and natural disasters is one of the responsibilities of INGD. • For roads related disasters, they have a mobile bridge which is installed to facilitate emergency access as ANE, IP implements measures to restore cut off access, they provide boats in case of flood related disasters. • Engineering designs should consider the flood peak volume and provide drainage infrastructure (box

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
							<p>culverts, bridges) that is commensurate with the risks posed by floods.</p> <ul style="list-style-type: none"> • Drainage should also be considered on flood plains where water flows to avoid flooding people's property and soil erosion. • Most of the roads in Mozambique have very many structures very close to the road or within the road reserve and these pose safety risks to drivers and people who live in such areas. • Most of the secondary access roads in Mozambique are in very poor condition and these humpers emergency operations. • Terrorists' attacks in the North have reduced and about 5000 IDPs have returned to their homes. • Most of the emergency response activities entail provision of shelter, food, WASH (Sanitation), and blankets. • INGD do not have own E&S staff but coordinate with other government institutions with E&S capacity to undertake any E&S related tasks.
5	Ministry of Transport and Communication (MTC)	Maputo	17/01/2024	5	1	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • Systematized data on road accidents (cumulative numbers) for Cabo Delgado, Nampula and Niassa. • Specific role of the MTC in managing the road network, from a communication point of view. 	<ul style="list-style-type: none"> • The MTC has a database of road accidents. The data exists in INATRO and DNTS, although they may not be systematized. • The MTC does not have a department that deals with ESHS matters, although the DNTS has focal points that interact with other institutions when it comes to environmental and safety matters.

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
						<ul style="list-style-type: none"> MTC has a department that deals with environmental, social, health and safety (ESHS) issues. 	<ul style="list-style-type: none"> There is no specific role for the MTC in managing the road network. However, the MTC regulates transport and road signs through INATRO. This work is carried out in coordination with ANE, IP. The environmental and social instruments being developed for the Climate Resilient Roads for the North should consider the National Roads Code. The team should also refer to E&S instruments of the Southern Africa Connectivity Project, including its feasibility studies. ANE< IP can provide these documents as they participated during the project preparation phase.
6	Ministry of Land and Environment (MTA)	Maputo	18/01/2024	1	0	<ul style="list-style-type: none"> Project scope, objectives, and targeted area, and assignment of the consultancy team. Technical specifications/guidelines to be included in road and bridge works to ensure climate resilience. Important aspects that the MTA considers relevant to include in the design and implementation phase of road and bridge projects. 	<ul style="list-style-type: none"> There is a National Climate Change Adaptation and Mitigation Strategy (2013-2025), which results from the implementation of the United Nations Framework Convention on Climate Change. Therefore, the project should rigorously include measures to mitigate the climate change effects. The ESMF should present the recommendation that site specific ESIA/ESMP consider provisions on risk assessment of climate effects and present provisions for mitigation. Gender and climate change aspects must also be considered. The final draft E&S instruments should be shared with the MTA for review and comment. There is a manual for building climate-resilient schools, which was developed by UN-Habitat with MTA support. MTA will share the manual.

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
							<ul style="list-style-type: none"> • There is also the Gender and Climate Change Strategy, which the project should consider. • At the local level, each district has a Local Climate Change Adaptation Plan, which the project should consider. This plan has a chapter on roads and bridges.
7	Ministry of Labor, Employment and Social Security (MITSS)	Maputo	19/01/2024	2	1	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • Main concerns and/or frequent risks and impacts related to occupational health and safety in different sectors, especially in civil works (roads, bridges, among others). • What have been the most recommended mitigation measures (in a strategic way) for situations of occupational risks and impacts, with focus on civil works (roads, bridges, among others). • Following the new Labor Law (Law no 13/2023) coming into force in February, it would be important to know whether there will be regulations to be updated in connection with the new Labor Law. Of particular interest to the project are the regulations related to general labor inspection; work accidents and occupational illnesses; hygiene and safety in industries, among others. • Data on the occurrence of work-related accidents, by sector (roads and bridge for example) and by province, in the last 2 to 5 years. 	<ul style="list-style-type: none"> • The project should observe the principles of local content, ensuring that national labor is prioritized in the hiring processes. • Foreign labor hiring processes should strictly follow the requirements of national legislation. • Health and safety requirements, including social security, should be observed. • National legislation does not determine the percentage (%) of female labor to be hired in certain jobs. However, the positive exclusion principle is acceptable. • The Ministry does not have a systematized database of work-related accidents. There are only administrative records of documents received from communications that companies send reporting accidents. • Based on these records, the Ministry will be able to provide data relating to the project targeted provinces (Cabo Delgado, Nampula and Niassa). • Since the meeting request letter did not specify the information required, meeting participants will escalate concerns to other departments within the

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
							Ministry, once the information is available the Ministry will contact ANE, IP and the Consultant.
8	Post-Cyclone Reconstruction Office (GREPOC)	Maputo	25/01/2024	1	1	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • Challenges that GREPOC faces in implementing activities, especially in relation to environmental and social aspects, and what recommendations may provide to consider in CRRNP project. • How GREPOC has dealt with security aspects in some areas of the Northern provinces. 	<ul style="list-style-type: none"> • GREPOC is a project management unit and has PIUs with all specialties relevant to its activities, including environmental and social safeguards. • Initially there was no demand for security specialists in the projects, but later there was a need to include in the tender documents for Contractors to have a security specialist, to advise on security aspects. • GREPOC's advice is to ensure that contractors' contracts include clauses on the need to provide periodic reporting on the implementation of E&S measures, including for the complaints management through a GRM. • One of the measures that GREPOC applies to limit river water pollution in intervention sites is to prevent concrete from being made on site, but only brought in for immediate application. • Institutional communication and coordination are essential to ensure security in project operations. The Security Forces are the ones who guarantee security for project operations in risk areas. • The issue of demining should always be considered. GREPOC deals with the demining through the Contractors. Therefore, the responsibility for demining is placed in the bidding documents, and contractors subcontract certified companies to carry out the demining where necessary.

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
9	ANE, IP provincial delegation	Pemba	17/01/2024	2	1	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • Current ANE, IP provincial level structure and the proposed structure for the time of project implementation. • Experience in managing activities in a security risk area. Lessons learned. 	<ul style="list-style-type: none"> • ANE, IP informed that there is neither a department nor an employee with security responsibility. All security issues, currently involving travel to high-risk areas and emergency response, are managed by the security defense forces, especially for the northern part of the province, providing support to ANE, IP and the contracted personnel in operation. • Due to the attacks in the northern part of the province there are road infrastructures (bridges) partially destroyed. • Two projects under ANE, IP portfolio were interrupted due to GBV related incident, and only after addressing the identified irregularities related to GBV the activities resumed.
10	Provincial Directorate of Health (DPS)	Pemba	18/01/2024	2	0	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • Operations in critical security area. • Gender-based violence in critical security areas. • High-risk areas for GVB in the province. • Main risks related to GBV in project context and vulnerable population. 	<ul style="list-style-type: none"> • The DPS operates in critical security areas under the guidance and protection of local forces. When security conditions are not adequate, the emergency health response is supported by local forces, with the DPS providing support through specific equipment and medications. • GBV has increased since the onset of terrorist attacks, especially in camps prepared for the displaced population. • Security high-risk areas include the districts of Ancuabe, Montepuez. • Awareness-raising actions within the population are carried out through community-level teams. Multisectoral teams, involving Health, Justice, Police

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
							(PRM), and Social Action, conduct lectures and sensitize community leaders and other respected entities at local level. <ul style="list-style-type: none"> The most common types of GBV are sexual, physical, and psychological violence, and the most vulnerable population is women.
11	Provincial Police Command (PRM)	Pemba	18/01/2024	2	0	<ul style="list-style-type: none"> Project scope, objectives, and targeted area, and assignment of the consultancy team. Situation of security risk in the province and future perspective. GBV related issues. Road traffic accident. 	<ul style="list-style-type: none"> The security high risk areas are the districts in the northern part of the province, namely: Palma, Mocímboa da Praia, Nangade, Muidumbe, Macomia, Quissanga, Meluco, and Mueda. Centers where IDP are located is where the greatest risk for GBV is. Poor conditions of some roads, lack of signaling and road maintenance contribute to traffic accidents. Generally, all districts have a police station, but considering the project's coverage area, not all stations are operational due to the terrorism situation.
12	Provincial Directorate of Industry and Commerce (DPIC)	Pemba	18/01/2024	1	1	<ul style="list-style-type: none"> Project scope, objectives, and targeted area, and assignment of the consultancy team. Relevance of the project for economic activities. 	<ul style="list-style-type: none"> The project implementation will stimulate increased agricultural production since one of the major challenges at the moment is the need for alternative roads for the transportation of agricultural products. The trade sector involves approximately 45% women, and with the project's implementation, we expect revitalization of some activities and thus increased participation from women, which may

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
							contribute to 5% impact in areas with agricultural potential.
13	Provincial Environment Services (SPA)	Pemba	19/01/2024	2	0	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • Recommendation for the project. 	<ul style="list-style-type: none"> • Suggestion to conduct a public consultation in Metuge or Quissanga, taking advantage of an extended government executive session where all district administrators covered by the project will be present.
14	Provincial Directorate of Gender, Children and Social Action (DPGCAS)	Pemba	19/01/2024	2	1	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • Operations in critical security areas. • Gender-based violence, and main risks related to GBV in the project context and vulnerable population. • Recommendation for the project. 	<ul style="list-style-type: none"> • Occurrence of sexual abuse by workers against vulnerable women in the communities. • The government has been working with community leaders for public awareness, and there is a multisectoral mechanism (PRM, Justice, Health, and Social Action) aiming for integrated care in the prevention and combat of GBV related risk. • High-risk zones for GBV are located further inland and with difficult access, hindering awareness campaigns. Communities lacking information show high GBV rates. • Some northern districts such as Macomia, Mocimboa da Praia, Ibo, Namuno have reported GBV cases resulting in deaths, with one contributing factor being alcohol consumption. • The most common types of GBV are physical, sexual, and psychological. • Women are the vulnerable group seeking the most support of the services of DPGCAS.

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
							<ul style="list-style-type: none"> Looking at the project scenario, it is recommended to conduct lectures, awareness campaigns at the community level, as well as for the contracted workers.
15	Ministry of Agriculture and Rural Development (MADER)	Maputo	30/01/2024	3	1	<ul style="list-style-type: none"> Project scope, objectives, and targeted area, and assignment of the consultancy team. Discuss if MADER has anything to recommend for consideration during project preparation phase and in the execution phase. MADER has an Environmental and Social Safeguards Office and therefore may want to share experience E&S safeguards in projects. 	<ul style="list-style-type: none"> MADER could have been better prepared if the meeting request had included details about the project. The safeguards documents should consider all relevant legislation, including for the agriculture sector. MADER asked what security we are talking about in relation to the Security Management Plan under preparation. The Consultant clarified that this is a plan that results from the security risk assessment for the northern provinces (Cabo Delgado, Nampula and Niassa), motivated by the risk situation currently observed in that region. This is a document that establishes the procedures that will be used to guarantee the safety of assets/infrastructure and people during the execution of the project. Occupational health and safety issues will be detailed in site-specific instruments (ESIA/ESMP) that will be developed later following the procedures established in the ESMF. MADER indicated that they are aware that the multinational Total is applying material on road asphalt that is resilient to the effects of climate

#	Institution met	Location	Date	Nr. of participants		Topics discussed	Main notes and recommendations
				Male	Female		
							<p>change. It is recommended that this technology be taken into consideration for this project.</p> <ul style="list-style-type: none"> • MADER will issue a note to the sector's provincial directorates to find out if they have anything to recommend regarding the roads that will be covered by the project. • It is important to ensure that preliminary E&S safeguards instruments are shared with civil society organizations for information.
16	National Administration of Conservation Areas (ANAC)	Maputo	1/02/2024	1	0	<ul style="list-style-type: none"> • Project scope, objectives, and targeted area, and assignment of the consultancy team. • Discuss if ANAC has anything to recommend for consideration during project preparation phase and in the execution phase. 	<ul style="list-style-type: none"> • ANAC indicated that the project is welcome and hopes that the project's interventions do not interfere with ecosystems, especially in conservation areas, Even considering that the intervention will be on existing roads. • ANAC is preparing to conduct research on the impact of climate change on rivers environment and will start with the Zambezi River from its entry into Mozambique to the Marromeu complex, in the province of Sofala.

ANNEX 7. STAKEHOLDER CONSULTATIONS DOCUMENTATION – PHASE 2: FEB.12 – 23, 2024

Summary of public consultations, indicating Summary of Issues raised, and responses provided; List of participants and Sample Photographs.

A. List of Stakeholders Met, Dates of Meetings and Gender Segregation of Attendance in Maputo and Pemba

B. Summary of Issues raised and responses Provided (Pemba)

#	NAME	QUESTION/COMMENT/SUGGESTION	RESPONSE/CLARIFICATION
1	Daudo Mussahale – Director Provincila da Aministração do Parque das Quirimbas	What type of roads are planned to be built in the project?	The Project envisages building asphalt and climate-resilient roads.
		Inside the Park, there are communities and tourist products with great potential for attraction. So, what is the possibility of the project including third roads, located inside the park?	The roads to be covered by the project have been selected. However, the concern will be taken to ANE with a view to analysis and integration into this project or possible additional project funding.
		Within the scope of project benefits, selected contractors must absorb local labor.	The consultant and ANE responded that the priority is always local labor, with the exception of specific positions that the district does not provide.
2	Gonsalves Vicente – Direção Provincial da Saude de Cabo Delgado	What is the temporal objective of the Project?	According to the consultant, the project will have a time horizon of 5 years (2024-2029)
		The presentation made it clear that community infrastructure will be built as part of the contracts. So, how will DPS benefit from this infrastructure?	The consultant responds that the community infrastructures will be built within the scope of the social responsibility of the contractors.

3	Augusto Hassane - Serviços Provinciais do Ambiente de Cabo Delgado	When will meetings/engagement take place at the local level where the project will be covered?	The consultant responded that public consultations are planned to take place in Pemba, as the capital of the province and districts covered by the project. However, the current security situation has not allowed public consultation to take place in the districts at this stage (project preparation). However, several public consultation meetings are planned at all phases of the project.
3	Carlos Buanaissa – Direção Provincial de Genero, Criança e Ação Social	Experience shows that ANE never completes road works as promised. Furthermore, on several occasions we have received complaints about road contractor employees being abandoned and without pay by ANE contractors. So, what guarantees do we have that the project to be presented will be completed?	According to ANE, the situation presented is very difficult, since ANE has a system for controlling contractors. So, in this project, in addition to the contract with the appropriate clauses, ANE will have a PIU with specific specialists to supervise the entire process.
4	Ezequia Pinto - Serviços Provincias de Emprego	In order to guarantee the achievement of project results, ANE must permanently raise awareness among communities.	The Project has an instrument called SEP, which aims to engage interested and affected parties. Therefore, through this, engagement meetings will be developed at all phases of the project.
5	Florindo Novo – Direção Provincial da Cultura e Turismo	The presentation made it clear that community infrastructure will be built as part of the contracts. So, how will Tourism Area will benefit from this infrastructure?	The consultant responds that the community infrastructures will be built within the scope of the social responsibility of the contractors.

			In order to guarantee the achievement of project results, ANE must permanently raise awareness among communities.	The Project has an instrument called SEP, which aims to engage interested and affected parties. Therefore, through this, engagement meetings will be developed at all phases of the project.
6	Cassimiro Ibraimo ATROCAD	-	Our roads (in Pemba) do not have information or road safety signs. So, does the project foresee the installation of information signs?	Yes, the second component of the project deals with improving road safety. So, here are costs for road signs and information.
7	Josefina Nicodemos AMMCJ	-	What is the temporal objective of the Project?	According to the consultant, the project will have a time horizon of 5 years (2024-2029)
8			What criteria were used to select the roads selected in the project?	?
			The province of Cabo Delgado is experiencing a moment of insecurity. So, how will ANE implement the project in critical areas?	Within the scope of the project's environmental and social instruments, there is a security risk assessment to support the project. Therefore, this instrument, in addition to providing information about the risks that exist in the project's intervention areas, proposes safety measures and a flowchart for assistance in the event of an emergency.
			In projects implemented in reconcluded areas, GBV problems have occurred. So, does this project involve institutions that look after GBV?	Yes, the project has an Action Plan to respond to GBV/SEA/SH, and the plan includes institutions as relevant elements for responding to the issue of GBV/SEA/SH. This GBV/SEA/SH action plan already presents actions to raise awareness among the local

			community so that the risk can also be controlled on the community side.
		The project must ensure community awareness about GBV and response mechanism.	Yes, the project has an Action Plan to respond to GBV/SEA/SH, and the plan includes institutions as elements for responding to the GBV/SEA/SH issue, as well as community awareness and GBV/SEA/SH response mechanism.
		Our roads today do not have drainage ditches, and the size of the speed bumps are not suitable for tourist vehicles that circulate in the province. So, the project proposes to incorporate drainage ditches because it will help a lot in preserving the road.	Thank you very much for your contributions.

Summary of Issues raised, and responses Provided (Nampula)

#	Question/Comment/Suggestion	Response/Clarification
1	<p><u>Florentino de Sousa (Technician at ANE)</u></p> <ul style="list-style-type: none"> We are happy with the project. We note that the text of the presentation does not make any description of climate in order to be linked with what the title of the presentation indicates, "climate resilience." It is indicated that the project will make improvements to the R689, but what should be done is reconstruction because the road is quite degraded; there is no way to make improvements only. 	<p>Thank you very much for your contributions.</p> <ul style="list-style-type: none"> Although the presentation does not present a description of climatic aspects, the Environmental and Social Management Framework (ESMF), in Chapter 4, presents a description of Nampula's climate classification. In the project implementation phase, technical assessment will be carried out to determine the level of intervention, and this matter will be clarified.

	<ul style="list-style-type: none"> • The issue of road safety will be a challenge as local communities remove traffic signs placed on the roads. Therefore, the project must include measures to resolve this problem. • The issue of GBV/SEA/SH is a reality, but the proposed actions must be in line with the habits of the local community. For example, the understanding is that sexual harassment begins with the construction workers, but sometimes it is people in the community who approach the workers. • Although the project will intervene on existing roads, and therefore the risk of resettlement is low and almost non-existent, the reality on the ground is that the right-of-way (ROW) / road reserved areas are occupied. It may also be that the movement of construction machinery or the construction of a yard may result in the loss of assets and, therefore, the need for resettlement/compensation. • There should have been consultation sessions at the project identification stage. 	<ul style="list-style-type: none"> • The GBV/SEA/SH action plan already presents actions to raise awareness among the local community so that the risk can also be controlled on the community side. • The ESMF already presents procedures to be followed in the event of the loss of infrastructures and assets.
2	<p><u>Olinda Bulacha (Technician at ANE)</u></p> <ul style="list-style-type: none"> • Although the project will intervene on existing roads, the issue of resettlement must be analyzed and taken into account because there is occupation in the road reserved area. • What is the meaning of affected and interested parties to the projects? • PAPs must be permanently involved in the project. • When meetings/engagement occur at the local level, it should be considered how people/participants travel to the locations where the meetings take place. We suggest that transportation be provided. • For the next investments in the road network, it is necessary to expand the selection criteria to consider not only the need to boost the development of the coastal area but also the agricultural potential and the need to transport agricultural products to the market. 	<p>Thank you very much for your contributions.</p> <ul style="list-style-type: none"> • Interested and Affected Parties are individuals or groups who are affected or likely to be affected by the project (project-affected parties), or who may have an interest in the project (other interested parties). Local communities and institutions represented at this meeting and others that are not here are also interested parties.
3	<p><u>Amade Bai Camicha (Provincial Directorate of Transport and Communications)</u></p>	<p>Thank you very much for your contributions.</p>

	<ul style="list-style-type: none"> What are the criteria used to select the roads to be intervened by the project. I believe that the ANE delegation in Nampula province should have information about the criteria used. For example, the Namigonha-Cule road section should have been included. 	<p>Response from ANE (Eng. Emília)</p> <ul style="list-style-type: none"> The need to boost the development of the coastal area, combined with the need to construct climate-resilient roads, was one of the criteria used to select the road to intervene in the province of Nampula.
4	<p><u>Momade Emusso</u></p> <ul style="list-style-type: none"> There are also other roads that require intervention and that could have been considered, for example, the Nacala-Velha to Nacala-Porto road and Chipenhe-Lúrio, among others. Promises have been made about these roads for almost 20 years, but there have been no results. 	<p>Thank you very much for your contributions.</p>
5	<p><u>Aires Benjamin (Provincial Directorate of Industry and Commerce)</u></p> <ul style="list-style-type: none"> We see that most of the activities of the project will be in the province of Cabo Delgado, but the province is experiencing a situation of military instability. There is a risk that the activities will not be able to be executed and result in a loss of the investment. Why not invest in provinces where there is instability? 	<p>Thank you very much for your contributions.</p> <ul style="list-style-type: none"> We believe that this investment is important for the province of Cabo Delgado to improve the road network. It can also be important for controlling the current situation of instability, where we see significant and continuous improvement as a result of the efforts of the government and partners.
6	<p><u>Isac Ibrahimo (ANE-Nampula)</u></p> <ul style="list-style-type: none"> ANE, at the central level, has knowledge of the road situation throughout the country. Nampula has 4,000 km of classified roads and 10,000 km of unclassified roads. There is an amount of around 1 million USD for road rehabilitation in the province. It is not possible at this time, with the resources available, to guarantee intervention on all roads. Because of that, the focus is on maintenance to ensure transitivity. 	<p>Thank you very much for your contributions. It ended up helping to answer and clarify the questions raised by previous participants, especially in relation to intervention on this and not all roads with problems in province.</p>

<ul style="list-style-type: none"> • There is a perception that the responsibility for taking care of the roads lies solely with ANE, but in fact, other sectors also have responsibilities. Therefore, each sector must do its part to ensure that the activities of that sector are carried out in such a way that they do not compromise the integrity of the roads. • The issue of employing minors must be analyzed on a case-by-case basis, because sometimes it is a question of family survival. Therefore, awareness-raising should focus on the local habits of the community. • We suggest that there be multisectoral coordination in the implementation of the project. This can solve problems in planning sectoral actions that have an influence on roads. • In relation to GBV/SEA/SH cases, it is necessary to ensure that the project addresses project-related complaints. However, the importance of reporting cases of GBV must be taken into account, and reporting should be for everyone involved at all levels, not just the practitioner but all connivers or moral perpetrators. 	
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Summary of Issues raised, and responses Provided (Lichinga)

#	Question/Comment/Suggestion	Response/Clarification
1	<p><u>Salvador Rabissone (Centro de Aprendizagem e Capacitação da Sociedade Civil / Civil Society Learning and Training Center -CESC)</u></p> <ul style="list-style-type: none"> • The R733 road is very important for the province of Niassa, currently serving as an alternative connection with Nampula and reaching Tanzania. • It is suggested that the N360 include the installation of road signs. • What will be the role of civil society organizations in implementing the project? • How local companies can intervene in the project, especially the construction companies. 	<p>Thank you very much for your contributions.</p> <ul style="list-style-type: none"> • Civil society organizations are very important to the project. Due to its knowledge at the community level, the project will always coordinate with them in carrying out activities, especially awareness-raising, including on GBV/SEA/SH issues. <p>Additional response from ANE (Eng. Emilia)</p>

		<ul style="list-style-type: none"> • Contracts that ANE enters with contractors typically recommend hiring local civil society organizations to deal with GBV/SEA/SH issues as service providers. • The contractor to be hired for the project's work will be via public tender, and local companies will also be able to compete.
2	<p><u>Tino Daniel (Social activist – ActionAid)</u></p> <ul style="list-style-type: none"> • Building climate-resilient infrastructure is very important. • It would have been good if local leaders from the areas where the roads will be repaired were at this meeting. • It is suggested that in cases where resettlement is required, dialogue should be prioritized. • What will be the role of civil society organizations in implementing the project? • What is the strategy to avoid child labor? • What is the strategy for monitoring these plans that have been prepared? 	<p>Thank you very much for your contributions.</p> <ul style="list-style-type: none"> • In fact, the participation of local leaders in this session would have been good. However, engagement continues from now on, and local leaders will be included. • Civil society organizations are very important to the project. Due to the knowledge, it has at the community level, the project will always coordinate with them in carrying out activities, especially awareness-raising. • The project developed labor management procedures (LMP), where minimum working age issues are detailed, in accordance with the provisions of the Labor Law in Mozambique and the requirements of the World Bank Environmental and Social Standard 2 (ESS2). Therefore, the employment of children is prohibited in the project. • The execution of the plans drawn up for the project will be permanently monitored by the Project Implementation Unit (PIU), where there will be a monitoring and evaluation (M&E) specialist. The various institutions of interest in this project will also monitor the execution of these plans. The Ministry of Land and Environment (MTA), through the Provincial Environmental Services (SPA), will also monitor all environmental and social issues related to the project.
3	<p><u>Aleixo de Assunção Alexandre (Provincial Directorate of Education)</u></p>	<p>Thank you very much for your contributions.</p>

	<ul style="list-style-type: none"> • We want to pass on the experience of what happens in projects in the education sector, where there are regular meetings with communities, to ensure that social issues are well implemented. This project could follow this good practice. • It is important that there are complaint boxes at the community level for complaints/suggestions to be forwarded. • Resilient infrastructures are those that resist extreme events. However, in the road sector, it is important that hydrological studies are carried out so that the results can be used to design roads and related infrastructure and thus ensure that the solution to be proposed takes into account potential long-term runoff. • When talking about improvements to the N360, R733, and R657, what improvements are they referring to and what activities are planned on each road? • When it comes to road safety, it is important to consider the installation of fixed speed cameras, pedestrian bridges in risk areas, and intervention equipment in the event of an accident. • After road rehabilitation, it is important to consider the possibility of granting concessions to these roads to ensure their maintenance and sustainability. 	<ul style="list-style-type: none"> • The Grievance Redress Mechanism (GRM) proposed for the project provides complaint boxes as entry points for complaints. • We have taken note of the recommendation to carry out a hydrological study to inform the design. • At this stage of project preparation, there are no technical details about the planned interventions. Therefore, there will be a specific assessment that will determine the level of improvement to be carried out. • The roads will be subject to a road safety assessment that will also determine the risk areas/locations and the safety solutions to be implemented, including those suggested here.
4	<p><u>Flávia Langa (Provincial Directorate of Agriculture and Fisheries)</u></p> <ul style="list-style-type: none"> • What is the action plan to compensate farmers who cultivate close to the roadside? 	<p>Thank you very much for your contributions.</p> <ul style="list-style-type: none"> • In principle, it is not expected that there will be resettlement because the intervention will be on existing roads where it is assumed that the roadsides are free/not occupied. However, the ESMF provides procedures to follow in the event of the loss of infrastructure and assets.
5	<p><u>Américo Geremias (Provincial Director of Infrastructure)</u></p> <ul style="list-style-type: none"> • It is important to clarify the steps until the project is approved to prevent participants from leaving thinking that the construction work will start "tomorrow." 	<ul style="list-style-type: none"> • Thank you very much for your contributions. It ended up helping to answer and clarify the questions raised by previous participants. • There are still many steps to be followed until the project is effectively financed. Therefore, participants should not

	<ul style="list-style-type: none"> • We hope that the project will not intervene on roads, and in the following year, the same roads are destroyed. The roads to be upgraded/reconstructed should be truly climate resilient. Therefore, all technical steps must be followed to ensure resilience. • Hydrological study is extremely important to provide data for better road designs and related infrastructures. • Agricultural production at the edge of roads is not permitted because it damages the roads. It is common to see sweet potato beds on the side of roads. Therefore, the respective sector must ensure that farmers do not cultivate on roadsides. • It was mentioned by one of the participants that there is a Law/regulation that requires the hiring of NGOs and civil society organizations. We are not aware of that law, which is why it is necessary to verify it and include it in the documents that are being prepared if they exist. 	<p>think that “the next day” there will be intervention on these roads.</p>
6	<p><u>Manuel da Silva Quimbire AEN and (CTA – Confederation of Economic Associations)</u></p> <ul style="list-style-type: none"> • Niassa has a cement factory ready to produce, but it is not yet operational. There is also high-quality limestone in the province. These elements have added value to the construction/rehabilitation of the province's roads, so the competent authorities should take measures to ensure that this factory comes into operation. 	<p>Thank you very much for your contributions. We have taken note.</p>
7	<p><u>Lídio Jafar (Provincial Directorate of Gender, Children and Social Action)</u></p> <ul style="list-style-type: none"> • In addition to working to raise community awareness about GBV/SEA/SH, it is also necessary to work with contractors. • Traffic signs placed on roads are often removed by the community. We suggest that resistant materials be placed that can discourage removal by communities. • We suggest that the list of roads selected for intervention can be expanded to include others that require intervention. 	<p>Thank you very much for your contributions. We have taken note.</p>

8	<p><u>Domingos Bernardo (Provincial Directorate of Culture and Tourism)</u></p> <ul style="list-style-type: none"> There are other important roads for the tourism sector in the province. These roads connect to tourist areas. For example, the Lichinga-Meconta road; Marrupa-Mecula; and access to the Niassa Special Reserve. 	<p>Thank you very much for your contributions. We have taken note.</p>
9	<p><u>Óscar Jaquissone (Niassa State Secretariat)</u></p> <ul style="list-style-type: none"> The list of interested institutions must include the police as they play an important role in preventing and combating GBV/SEA/SH and in providing security for project infrastructures. 	<p>Thank you very much for your contributions. We have taken note.</p>
10	<p><u>Conceição Calisto (ESTAMOS - Community Organization)</u></p> <ul style="list-style-type: none"> I suggest that speed bumps be placed on the Lichinga-Lago road. 	<p>Thank you very much for your contributions.</p> <ul style="list-style-type: none"> The roads will be subject to a road safety assessment that will also determine the risk areas/locations and the safety solutions to be implemented, including those suggested here.
11	<p><u>Muajibo Omar (Provincial Environmental Services -SPA)</u></p> <ul style="list-style-type: none"> I would like to know if the project provides a budget for environmental licensing. 	<p>Thank you very much for your contributions.</p> <ul style="list-style-type: none"> The ESMF presents a tentative budget for its implementation, and one of the elements is the preparation of site-specific environmental and social impact assessment (ESIA), including licensing.
12	<p><u>Oreste Zezela (ANE-Niassa Delegate)</u></p> <ul style="list-style-type: none"> The province's desire is for the roads to be paved and not just improved. 	<p>Thank you very much for your contributions.</p>

ANNEX 8. GBV AND SEA/SH PREVENTION AND RESPONSE ACTION PLAN

This document is designed to comprehensively assess the risks associated with Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), Sexual Harassment (SH) and Violence Against Children (VAC) relevant to the project context, including activities related to the Climate Resilient Roads for the North Project (CRRNP) in Mozambique. The primary aim is to identify potential GBV/SEA/SH risks and develop a strategic action plan for their mitigation and response. This assessment and action plan are an integral to ensuring the safety, dignity, and rights of all individuals affected by the project, particularly in vulnerable communities.

The GBV/SEA/SH Risk Assessment and Action Plan is an annex to the Environmental and Social Management Framework (ESMF). It complements the ESMF by specifically addressing the social risks of GBV, SEA, SH and VAC associated with the project activities. This document is a critical part of the ESMF, providing a focused and detailed approach to identifying, mitigating, and managing GBV/SEA/SH risks in alignment with the broader environmental and social safeguards outlined in the ESMF.

This document adheres to the guidelines set forth by the World Bank, particularly those detailed in the World Bank's Good Practice Note on Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project Financing involving Major Civil Works (3rd edition, October 2022)⁷. These guidelines emphasize the importance of identifying and mitigating GBV/SEA/SH risks, ensuring the protection and empowerment of affected communities, and incorporating these measures into the project's overall risk management strategy. The World Bank's guidelines serve as a foundational framework, guiding the development of this action plan to align with international best practices and the specific requirements of the Bank for project financing.

Below is the summary GBV/SEA/SH Action Plan. Please refer to a separate GBV/SEA/SH Risk Assessment and Action Plan for details.

⁷ <https://pubdocs.worldbank.org/en/632511583165318586/ESF-GPN-SEASH-in-major-civil-works.pdf>

Nr.	Risks	Mitigation Measures	Indicators	Responsible	Timeline	Estimated Budget
1	Insecure temporary housing during resettlement can increase the vulnerability of women and girls to sexual and physical violence.	Provide secure temporary housing for women and girls during resettlement to reduce their vulnerability to sexual and physical violence.	# Incidents of sexual and physical violence reported in the resettlement areas compared to baseline data	Resettlement Consultant/ PIU / Inspection Consultant	Q1	\$10,000
2	Construction in remote areas can lead to a detachment from social norms and increase risk-taking behaviors, including SEA and SH.	Promote adherence to social norms and ethical behavior in remote construction areas to counter detachment and risk-taking behaviors.	Feedback from workers on the understanding and adherence to ethical norms post-training.	Contractors/ GBV Service Provider/ inspection Consultant	Q2Q3Q4	\$5,000
3	Displacement due to land acquisition for road construction exacerbates the risk of GBV.	Offer counseling, legal assistance, and social support to those displaced due to road construction, mitigating the exacerbated risk of GBV.	Cases of gender-based violence (GBV) reported pre and post the implementation of support services.	PIU / GBV Service Provider	Q2Q3Q4	\$15,000
4	Women's involvement in construction and leadership in community resilience committees	Implement training and sensitization programs to address resistance against women's involvement in construction and leadership roles.	Number of training and sensitization programs conducted.	Contractors/ GBV Service Provider	Q2Q3Q4	\$55,000

	can exacerbate resistant to these gender role changes.	Include measures to protect women from harassment and discrimination				
5	Women working in construction may face SH and could feel compelled to tolerate inappropriate behavior to maintain employment.	Establish strict anti-harassment policies and confidential reporting mechanisms in construction workplaces to protect women from sexual harassment.	Number of harassment cases reported and resolved. - Employee awareness of anti-harassment policies, as measured by surveys.	Contractors/ GBV Service Provider	Q2Q3Q4	\$15,000
6	Women participating in the projects are vulnerable to abuse with limited avenues for redress.	Provide accessible and safe avenues for women participating in projects to report abuse and seek redress, ensuring confidentiality and protection from retaliation.	Utilization rate of reporting avenues. - Number of cases successfully redressed. - Feedback on the confidentiality and effectiveness of the reporting system	Contractors/ GBV Service Provider	Q2Q3Q4	\$60,000
7	Displaced persons living near workers' accommodations and camps are at an increased risk of exploitation and violence.	Implement patrolling, community watch programs, and awareness campaigns near worker accommodations and camps to protect displaced persons from exploitation and violence.	Reduction in incidents of exploitation and violence. - Community feedback on the effectiveness of watch programs	Contractors/ GBV Service Provider	Q2Q3Q4	\$20,000

8	Young women and girls may be particularly vulnerable to child marriage, trafficking, and HIV/STIs, including unwanted pregnancy, often exacerbated by the influx of labor in their areas.	Collaborate with local NGOs and law enforcement to prevent child marriage, and trafficking, and mitigate risks related to HIV/STIs, particularly focusing on young women and girls in labor influx areas.	Reported cases of child marriage, trafficking, and HIV/STIs	GBV Service Provider	Q2Q3Q4	\$10,000
9	Women's economic dependence and fear of repercussions in reporting GBV create significant barriers to effectively addressing these issues.	Facilitate economic independence for women through skill development and employment opportunities, and encourage reporting of GBV by ensuring anonymity and protection.	Number of women participating in skill development and employment opportunities.	GBV Service Provider	Q2Q3Q4	\$30,000
10	Displacements intensify GBV risks, including those posed by the presence of armed security forces.	Develop crisis response plans, including safe spaces and psychological support for victims of GBV for IDP	Number of victims accessing safe spaces and psychological support. - Effectiveness of crisis response plans, assessed through victim feedback.	GBV Service Provider	Q2Q3Q4	\$15,000
11	Workers, especially those in offsite accommodations near IDP resettlement camps, often exploit and abuse vulnerable individuals	Enforce strict codes of conduct for workers in offsite accommodations near IDP camps, with regular monitoring and swift action against perpetrators.	Compliance rate with codes of conduct and GBV trainings - Number of incidents reported and actions taken against perpetrators.	Contractors/ GBV Service Provider	Q2Q3Q4	\$70,000

12	Communities may have lack of information related to GBV risks related to the project	Develop a robust community awareness on GBV /SEA risks related to the project	Number of Awareness Campaigns Conducted Increase in the number of GBV/SEA cases reported following the awareness drives. Level of active participation from the community in these campaigns.	GBV Service Provider	Q2Q3Q4	\$120,000
13	Service delivery in project areas are fragmented and low resourced	Implement mobile services and case management under survivor centered approach	Number of Mobile Units Operational: The count of mobile units or teams that are actively providing services. Geographical range covered by the mobile services. Number of survivors accessing the mobile services.	GBV Service Provider	Q2Q3Q4	\$30,000
Total						\$455,000

ANNEX 9. ENVIRONMENTAL AND SOCIAL POLICIES, REGULATIONS AND LAWS

The Constitution of Mozambique, approved in 2004, Articles 45, 90 and 117 establishes the policies and principles that guide the protection and preservation of the environment. The law points out that every community has the right to live in a healthy and safe environment and has the duty to protect it. While Article 117 of the Constitution states that everyone has the right to an ecologically balanced environment, a healthy quality of life, it also imposes on the government and the community the duty to protect and preserve the environment for present and future generations.

National Environmental Policy (Resolution No. 5/95) - Provides the basis for various other environmental legislation. The instrument has been enacted to ensure sustainable development while maintaining an acceptable balance between socio-economic development and environmental protection. It stipulates that the integration of environmental considerations in socio-economic planning, the management of the country's natural resources and the protection of ecosystems are essential ecological processes. The relevance of this instrument for the project is that the provision contained in it should be reflected in the project to minimize the project risks and impacts on natural resources and ecosystems.

In 1997 the Environmental Act (Act no. 20/97, October 1) was approved, which requires that all public and private activities with the potential to influence the environment must be preceded by an EIA in order to identify and mitigate possible impacts resulting from the project, a process that culminates with the environmental licensing. The Act defines the EIA process as a tool for environmental management and supports the GoM in taking decisions regarding the allocation of environmental permit for project development (Article 15). Article 4 of the Environment Law establishes a range of basic legal principles, which highlight:

- the principle of rational use and management of environmental components, with a view to further improve the quality of life of citizens and the maintenance of biodiversity and ecosystems;
- the precautionary principle, whereby the environmental management should prioritize the establishment of systems to prevent acts that could be harmful to the environment, to prevent the occurrence of significant negative environmental impacts or irreversible damage, regardless of the existence of scientific certainty about the occurrence of such impacts; and
- the principle of global and integrated vision of the environment as a set of interdependent natural ecosystems, which must be managed so as to maintain their functional balance.

Environmental Law (Law No 20/97) also provides for the participation of local communities in the formulation of policies and laws related to natural resource management, management of protected areas, which is of relevance to the Program. This law has formed the basis for defining specific environmental laws and regulations.

Regulation for Environmental Impact Assessment - ESIA (Decree No. 54/2015, of December 31st)

The Labor Law (23/2007) - is the main statute governing all aspects of the employment relationship. There is also other derivative legislation on various lateral aspects of the employment relationship

(e.g., the legal framework on domestic work. It also determines the minimal wages per sector. For the 2020 construction sector, the minimum wages were approximately six thousand and six hundred fifty meticaís (6,650 Meticaís). However, a new Labor Law was recently approved, the Law no 13/2023 of August 25th, which will come into force in February 2024. The most significant changes introduced in this new Law include:

- freedom given to small and medium-sized enterprises to enter fixed-term contracts, to make their activity more viable.
- imposition of a maximum term for the duration of fixed-term contracts, under penalty of them being considered converted into long-term/ permanent contracts.
- right to vacation: 12 days in the first year of the contract and 30 days in subsequent years.
- adoption of principles relating to teleworking/ working from home, which derive from the practice introduced during the Covid 19 pandemic.
- acceptance of the working practices and customs of each profession, sector of activity or company as sources of labor law, as long as they are not contrary to the law and the principle of good faith.
- acceptance of codes of conduct established between the parties, as a source of right to work.
- possibility of suspension of the employment relationship due to unforeseeable circumstances or force majeure.
- establishment of a sanctioning regime for cases of harassment at work.
- permission for alternating working hours.

The country was also established by Law No. 4/2007 of February 7, the legal framework for social protection. This Law defines the foundation that underpins Social Protection and organizes the Social Protection system. The social protection system is structured in three levels, namely: a) Basic Social Security; b) Mandatory Social Security; c) Complementary Social Security. The mandatory social security has the objective to ensure the livelihood of workers who lack or have a decreased capacity to work as well as to ensure the livelihood of surviving family members in case of the death of the aforementioned worker and to provide supplementary conditions for survival. Contributions to mandatory social security are distributed between employers and workers.

Water Policy (Resolution No. 46/2007) – It provides aspects of sanitation in urban areas, peri-urban and rural areas, hydrologic networks, development of new hydraulic infrastructure, and integrated management of water resources with the participation of interested parties.

Water user use (Law No. 16/91) – The policy seeks to protect ecological balance and environment. The use of water requires concession- permanent or long-term water uses; or a water license- short term water uses. Licenses are issued for a period of 5 renewable years, while concessions may go up to 50 renewable years. The law provides that any activity with the potential of contaminating or degrading public waters, in particular the discharge of effluent, is subject to a special authorization to be issued by the Regional Water Administration and payment of a fee. If the project requires the abstraction of water from natural sources, a water license must be obtained from the competent authority (Regional Administration of the Waters). If the project requires the discharge of effluents into water bodies (such as may be required by construction camps), a license must be obtained.

Pollution (Law No. 20/97) – The law forbids the production and deposition of any toxic or polluting substances on soils, sub-soils, water, or the atmosphere, as well as forbidding any activities which are

likely to accelerate any form of environmental degradation beyond the legally established limits. The project needs to include measures to prevent pollution throughout its life cycle. Project compliance with regulation is critical.

Land Policy (Resolution No. 10/95) – It sets out that the State must provide the land for each family to build or possess their habitation, and is responsible for land use and physical planning, although plans can be made by the private sector. The principle of this policy must be incorporated into the CRRN project.

Land use rights (Law No. 19/1997) – Establishes the rights of land use, including details on customary rights and procedures for acquisition and use of land titles by communities and individuals. The law recognizes and protects the rights acquired through inheritance and occupation (customary rights and duties of good faith), except for legally defined reserves or areas where land has been legally transferred to another person or institution. It provides that the 15 m corridor surrounding secondary and tertiary roads, and the 30 m corridor for primary roads, is defined as public domain. The land use in this corridor is thus reserved for the road infrastructure. The project compliance with this provision is critical and it should inform the resettlement and compensation process, if applicable.

Biodiversity protection (Law No. 20/97) – Covers aspects of guaranteeing the protection of biological resources, particularly of plant or animal species threatened with extinction or any similar issues, by their genetic value, ecological, cultural, or scientific, require special attention. Protection is extended to their habitats, especially those built-in areas of environmental protection. This law is in line with the conservation areas (Law No. 16/2014), which stipulates that all activities that could result in changes to land and vegetation cover, or that could disturb flora, fauna, and ecological processes up to the point of compromising their maintenance, are forbidden within national parks, except if required for scientific reasons or management needs. It also indicates that activities can be approved within conservation areas, provided that a management plan is developed and approved.

Forest and wildlife protection (Law No. 10/99) - Provides the fundamentals and basic rules on protection, conservation, and sustainable use of forest and wildlife resources. Defines protection zones as territorial delimited areas, representative of the national natural heritage, designated for their biodiversity and fragile ecosystems, or the conservation of animal and plant species. It ensures that all activities that result in changes to land, disturbance to flora or fauna as well as water pollution are forbidden within national parks. The protection of forests and fauna under the CRRN Project is paramount. Decree No. 12/2002 approves the regulation of Law 10/99 and applies to protection, conservation, use, exploration, and production activities of fauna and flora resources.

Conservation areas (Law No. 16/2014 on Protection, Conservation and Sustainable Use of Biological Diversity,) - It stipulates that all activities that could result in changes to land and vegetation cover, or that could disturb flora, fauna and ecological processes up to the point of compromising their maintenance, are forbidden within national parks, except if required for scientific reasons or management needs. It also indicates that activities can be approved within conservation areas, provided that a management plan is developed and approved.

Conservation Law No. 5/2017, Article 11 states that a public or private entity exploiting natural resources in a conservation area or its buffer zone must contribute financially to the protection of

biodiversity in the conservation area in question, and compensate for impacts to ensure there is no net loss of biodiversity.

Cultural Heritage (Law No. 10/88) – This seeks to protect material and non-material assets of the Mozambican cultural heritage. Material cultural assets include monuments, groups of buildings with historic, artistic or scientific importance, places or locations (with archaeological, historic, aesthetic, ethnologic or anthropologic interest) and natural elements (physical and biological formations with particular interest from an aesthetic or scientific point of view). If archaeological objects are found during subprojects implementation, this law shall apply and the subcontractor shall communicate the finding to the appropriate cultural heritage agency, immediately. To meet this requirement, a Chance Finds Procedure has been prepared as part of this ESMF.

MOZAMBIQUE NATIONAL ENVIRONMENTAL AND SOCIAL ASSESSMENT AND PERMITTING

Thematic Review:

Environmental and Social Assessment, Audit, and Inspections

Regulation for Environmental Impact Assessment - ESIA (Decree No. 54/2015, of December 31st) -

It defines the fundamental instruments for environmental management, the ESIA, which aims at mitigating the negative impacts that certain projects, in the public and private sectors, may cause to the natural and socio-economic environment, through the undertaking of environmental and social studies prior to commencement of the projects. This also sets out the environmental and social impact assessment process, required environmental and social studies, public participation process, the studies review process, project environmental and social viability decision process, and environmental and social license emission. So, any project should be submitted to a formal ESIA process, under this regulation. So, for CRRNP an environmental license needs to be obtained from MITA, and the issuance of the environmental license precedes any other license or permit required for the subprojects.

Regulation on the Environmental Audit Process (Decree No. 25/2011)

– Relates to the need and process for an environmental audit. It indicates that an environmental audit is a documented and objective instrument for management and systematic assessment of the management system and relevant documentation implemented to ensure the protection of the environment. Its objective is to assess compliance of work and operational processes with the environmental management plan, including the environmental legal requirements in force, as approved for a particular project. The proposed CRRNP should require independent environmental audits, without prejudice to the public that may be requested under this decree during the implementation phase.

Regulation for Environmental Inspections (Decree No. 11/2006)

– It governs the supervision, control, and verification of compliance with environmental protection rules in the country. It may happen that, during project implementation, MITA carries out inspections to verify compliance with environmental legislation and site management instruments (Environmental and Social Management Plan- ESMP). ANE, IP shall allow for and facilitate the undertaking of such inspections.

Procedures on environmental licensing (Ministerial Diploma No. 129/2006) – stipulates the environmental license procedures, its format, and outline and contents of an environmental impact

assessment report. The ministerial diploma aims to standardize the process and the procedures followed by various players in the environmental impact assessment process. The CRRNP safeguards instruments (ESIA, ESMP, and Resettlement plans) reports for various subprojects, should be aligned with the provision of this regulation.

Public Participation methodologies and procedures (Ministerial Diploma No. 130/2006) - Defines the basic principles related to public participation, methodologies, and procedures. Considers public participation as an interactive process that initiates at the design stage and continues through the lifetime of the project. It defines that Public Participation Process (PPP) for ESIA must conform to the guidelines provided in this Ministerial Diploma.

Labor and Working Conditions

Protection of Workers with HIV and AIDS (Law nº 5/2002) – It sets out general principles that aim to ensure that all employees and job applicants are not discriminated against in the workplace or when applying for jobs, for being suspected of having or having HIV and AIDS. Under the law, an employee who is infected with HIV and AIDS in the workplace, in connection with their professional occupation, in addition to the compensation which one is entitled to have, one must have adequate health care guaranteed to relieve one's health status, according to the labor law and other applicable legislation, funded by the employer. Under the same law, it is prohibited to test for HIV and AIDS in workers, job seekers, candidates to evaluate the training or promotion candidates at the request of employers, without the employee's or job seeker consent. The project must ensure that workers involved in the project, are aware of the law, and where workers are infected, they shall be placed in positions compatible with their residual capacities.

Labor inspection (Decree nº 45/2009) – This regulation lays down the rules on inspections, under the control of the legality of work. It states the employer's responsibility for the prevention of occupational health and safety risks of the employee. These provisions must be enforced under the CRRNP especially concerning contractors involved in different subprojects.

Labor relations (Law Nº 23 /2007) – This law governs work relations between employers and domestic and foreign workers in all industries. The law includes principles of safety, hygiene, and health of workers. Under the law, an employer must provide their employees, good physical condition, environmental and moral work, inform them about the risks of their work, and instruct them about compliance with the standards for hygiene and safety at work. The employer must also provide first aid to workers in the event of accidents, sudden illness, poisoning, or feeling unwell. This law shall be applied under the CRRNP especially to all contractors operating under various subprojects. Under this law, child labor is prohibited as it does not allow for employment below 18 years old.

There is no specific legislation on Gender. However, the Ministry of Gender has developed policies and strategic plans to decrease gender-based inequalities within different sectors. Therefore, Gender is mainstreamed in different pieces of legislation. In the last years, the Parliament has approved the **Family Law 10/2004 of 25 August 2004**, the reformed Family Law establishes gender equality, later, approved the **Law Nr 29/2009 on Domestic Violence 2009**, in 2019 the parliament passed on the Law Against Early Marriages.

Resource Efficiency and Pollution Control Management:

General Pollution Management

Environmental law (Law No. 20/97) - Establishes the maximum standard of toxic substances allowed for discharge into the air. The emissions are further stipulated in Decree No. 18/2004. This law is relevant for the project given the permitted level of emissions by law, so as not to harm the environment.

Regulation for Environmental Standards and Effluent Emission (Decree No. 18/2004 (as amended by Decree No.67/2010)) - Establishes parameters for the maintenance of air quality; patterns of emission of gaseous pollutants for various industries; and standards for emission of gaseous pollutants from mobile sources - including light and heavy vehicles. The CRRNP shall comply with the air quality standards, considering the admissible emissions by law, so as not to harm the environment.

Water Quality

Water quality for human consumption (Ministerial Diploma n.º 180 / 2004) - Defines water quality standards for human consumption and define measures for its control, to protect public health. Any project must meet water quality standards for human consumption.

Environmental Quality Standards and Effluent Emissions Decree No. 18/2004 – this defines that when an industrial effluent is discharged into the environment, the final effluent must comply with discharge standards established. The law also incorporates the discharge of domestic effluents.

Waste Management

Regulation on urban solid waste management (Decree No. 94/2014) – Establishes the legal framework for the management of municipal solid waste. The key objective is to establish rules for the production, collection, or disposal of municipal solid waste to minimize their negative impacts on health and the environment. Municipal solid waste, under this regulation, is classified according to the NM339 Mozambican Standard - Solid Waste - Classification. Waste management obligations are assigned to Municipal Councils and District Governments in their respective areas of jurisdiction.

Hazardous Waste Management (Decree No. 83/2014) – Establishes the legal framework for hazardous waste management. The key objective is to lay down rules for the production, collection, or disposal of hazardous waste to minimize the negative impacts on health and the environment. MITA is responsible for hazardous waste management, especially in licensing of management units. Only registered and licensed entities may collect and transport the waste outside the limits of the facilities. The project must conform to the regulation's requirements related to the management of hazardous wastes during construction work and operation.

The environmental legal framework is overall referred to as the need for balanced development and recognized the vulnerability of Mozambique to Climate Change. In 2010 the country approved the National Climate Change Adaptation and Mitigation Strategy (NCCAMS), which represents a turning point in Mozambique's response to the challenges of climate change, indicating a clear set of strategic actions to be implemented so that Mozambique can ensure a more prosperous, resilient and sustainable future.

Land Use and Rights

Protection Zones (Decree No. 66/98) – This regulation defines total and partial protection zones. In these zones, land use is restricted, and the project should consider the interferences with these protection zones so that the implementation does not violate this provision of the law. It is a regulation that defines total protection areas, set aside for nature conservation and State defence, as well as partial protection zones, where land-use titles may not be granted, and where activities cannot be implemented without a license. Partial protection zones, which include, amongst others: 50 m strip of land along lakes and rivers, 250 m strip of land surrounding dams and reservoirs, 100 m strip of land along the seafront and estuaries, a strip of 2 km along the terrestrial border, and a 50 m corridor of protection for the railway lines.

Decree 109/2014 on the Regulation of the Use of the Roads and their Protection Zones.

Partial protection zones for road infrastructure are defined as a 15 m width along either side of secondary and tertiary roads, a 30 m width on either side for primary roads, and 50m for four lane highways. The land use in this corridor is reserved for road infrastructure.

Regulation for the Resettlement Process Resulting from Economic Activities (Decree No 31/2012) – Stipulates rules and basic principles for resettlement processes from the implementation of public or private economic activities. Equally, it provides that the Resettlement Plan is part of the ESIA process and that its approval precedes the issuance of the environmental license.

Technical Guideline of Planning and Implementation Process of Resettlement Plans (Ministerial Diploma No. 156/2014) – It provides the operation of the Regulations on the Resettlement Process and facilitates greater involvement and rapprochement between all parties involved, so that the resettlement does not have a social destructive character but takes the opportunity to develop well-structured and standardized new housing centers. It sets the conceptual framework for the development of Resettlement Action Plans. It equally presents guidelines of the process and identifies the different steps that characterize the development and implementation of the resettlement plan and sets out the content and the results required for each phase. This plan identifies all potentially affected people by the project and characterizes the affected improvements.

Technical Monitoring Commission Regulation (Ministerial Diploma No. 155/2014) – Establishes the organization and functioning of the actors in the monitoring and supervision of resettlement.

Territorial Planning (Decree No. 23/2008) – It establishes regulatory territorial planning measures and procedures, to ensure the rational and sustainable use of natural resources, regional potentials, infrastructure and urban centers, and to promote national cohesion and safety of the population. It deals with issues of procedures for expropriation of private property for national public interest reasons. The regulation provides that expropriation for territorial planning is considered to be of public interest if it aims to acquire areas to build economic or social infrastructure with great social positive impacts. Additionally, it states that expropriation should be preceded by just compensation. Most likely, the project will require the expropriation of land and land rights in the project area. The expropriation process should abide by the requirements stated in this regulation, namely the principle of just compensation for losses of property or goods. It also contains applicable procedures in case someone is opposed to the expropriation and/or wishes to contest the compensation amount. Expropriation requires the issuance of a declaration of public interest for the project.

Guidelines for the Expropriation Process Resulting from Territorial Planning (Ministerial Diploma No. 181/2010) – Sets procedures for the expropriation processes resulting from territorial planning,

including procedures for the issuance of a declaration of public interest, compensations for expropriation (including calculation methods) and the expropriation process itself. Expropriation of land and land rights within the project area must follow the procedures established in these guidelines.

Biodiversity Conservation and Sustainable Management of Living Natural Resources

Decree 89/2017 is applicable to the set of values and natural resources existing in the national territory and in waters under national jurisdiction, covering all public or private entities that may directly or indirectly influence the national system of the country's conservation areas, competing to the National Administration of Conservation Areas (ANAC). Protection zones are classified to guarantee the representative conservation of ecosystems and species and the coexistence of local communities with other interests and values to conserve. Protection zones are classified into: a) Total conservation areas; b) Conservation areas for sustainable use. In addition, it regulates the creation, modification and extinction of conservation areas, the administration and management of conservation areas, the management plans and closure program, the permitted and prohibited activities in conservation areas (including hunting activities), the exercise of activities in the conservation areas, including the environmental license, the recovery, restoration or rehabilitation of biodiversity, the mechanisms for compensating the conservation effort, the conservation of the natural habitat, and the protection and inspection of biodiversity, setting the sanctioning regime.

Articles 124 outlines the different types of compensation related to conservation: a) Compensation for ecological services provided by the conservation area and buffer zone; b) Compensation for anticipated and quantifiable impacts in environmental licensing, caused by the use of natural resources in conservation areas and buffer zones, and ensuring that there is no net loss of biodiversity; c) Compensation for unforeseen or unquantifiable impacts on biodiversity in the environmental licensing, in order to achieve no Net Biodiversity Loss; d) Payment for carbon stocks related to a conservation area and its buffer zone.

Article 125 outlines requirements for no net biodiversity loss: 1. No net loss of biodiversity is a goal for a development activity or project, where impacts on biodiversity are fully offset by measures to prevent and minimize the loss of biodiversity. 2. No net loss of biodiversity implies that it should not reduce in the following cases: a) Within a species and between species or vegetation types; b) The long-term viability of species and vegetation types, ensuring the adequate size of their populations and areas of occupation; c) The functioning of groupings of species and ecosystems, including ecological and evolutionary processes.